



The **PLUG INTO** *Solutions Network*

Rochester, NY August 8–11



Workshop sponsored by:
U.S. Department of Energy, Federal Energy Management Program

co-sponsored by:
U.S. Department of Defense and
U.S. General Services Administration



New This Year!

- Nearly 100 new presenters and many first-time energy workshop exhibitors
- Tour of a biomass facility, a stop at a large power plant and a visit to some renewable energy and energy-efficient facilities
- Tuesday Night Networking/Educational Event at the Rochester Museum and Science Center
- Hands-on interactive field exercises
- A bike tour along the Erie Canal

Corporate Sponsors

Sustaining Sponsor:



Supporting Sponsors:



Contributing Sponsors:



Schedule Information

Sunday, August 8 - Wednesday, August 11

Receptions

Sunday5 p.m. - 8 p.m.
Monday5 p.m. - 6:30 p.m.

Opening Plenary

Monday8:30 a.m. - 10 a.m.

Networking Breakfasts

Monday, Tuesday
& Wednesday7:30 a.m. - 8:30 a.m.

Networking Lunches

Monday12 p.m. - 2 p.m.
Tuesday.....12 p.m. - 2 p.m.

Networking/Educational Event

Tuesday.....6 p.m. - 9 p.m.

Closing Luncheon Plenary

Wednesday12 p.m. - 2:30 p.m.

Exhibit Hall Open

Sunday5 p.m. - 8 p.m.
Monday10 a.m. - 6:30 p.m.
Tuesday7:30 a.m. - 4 p.m.

PLUG INTO *The Solutions Network*

Make Plans Now to Join Your Colleagues at Energy 2004

If you're involved in the facility energy management field or provide products and services to those who are, you should attend Energy 2004 — "The Solutions Network." This is the year's premier workshop and networking forum for federal energy managers and their private sector counterparts.

Few industries in America are undergoing as many changes these days as the energy field. Are you ready for the challenges facing you in the coming years? Government regulations, fuel shortages, new technologies, skyrocketing costs and a host of other factors are combining to make your job even more difficult — and much more important — than ever before.

If you're interested in learning more about the best ways to do your job, finding out how your colleagues are dealing with energy problems, and understanding the options available to help you meet your facility's energy needs, then you need to attend this workshop. If your firm provides innovative energy products or management services, then networking at this federal workshop should be an essential part of your marketing strategy. You don't want to miss it!

This year's program builds on the successes of our previous workshops and offers the latest information needed by energy managers, procurement officials, engineers, utility representatives and others involved in this field.

- *Energy 2004 presents more than 60 sessions on a wide variety of topics, with nearly 200 experts from around the country sharing their experience, knowledge and ideas.*

- *Energy 2004 will feature more than 100 exhibitors with the latest products, technologies and strategies for energy savings in buildings like yours.*
- *Energy 2004 will offer special programs designed for new energy managers as well as more advanced sessions on specific technical topics.*
- *Energy 2004 will give you the information and ideas you need to take back to work and help your organization start making a difference in your energy program now.*
- *Finally, Energy 2004 will bring together hundreds of other energy managers in informal networking opportunities for you to share your concerns, needs and goals. Find out what others are doing to make their buildings even more efficient.*



As always, this year offers a great program at a great value. You'll hear some of the nation's top energy experts in stimulating plenary sessions and three days of power presentations by people who are on the line every day working on energy-saving projects. There's plenty of time on the schedule for you to talk with the vendors about their products and services, and to visit with your colleagues to find out more about what your peers are doing.

Rochester, New York, is a city full of surprises. You'll enjoy the pleasant

August weather, the fun evening activities and the relaxed atmosphere of a big-city feeling with a slower-paced lifestyle.

Visit our website at www.energy2004.ee.doe.gov for all the information on this year's program. If it's your job to implement energy-saving programs in your agency or organization, you can't afford not to join us this August for Energy 2004. Make your plans now to join The Solutions Network and be part of the most informative and exciting annual venue in the energy field today!

Come Hear Our Distinguished Speakers!

Opening Plenary (Monday, 8:30 a.m. - 10 a.m.):

Our opening session will feature leaders in the U.S. Department of Energy regional offices, DOE's Office of Energy Efficiency and Renewable Energy, and the U.S. Department of Defense.

Closing Plenary (Wednesday, 12 p.m. - 2:30 p.m.):

During our closing luncheon, you'll hear from GSA Administrator Stephen Perry and special keynote speaker John L. Howard, Jr., the Federal Environmental Executive.

John Howard has worked in the environmental and natural resources field for the past 15 years. In April, 2002, President George W. Bush appointed him as the Federal Environmental Executive and Chair of the White House Task Force on Waste Prevention and Recycling. He and his



John Howard, Jr.

office are working to promote sustainable environmental stewardship throughout the federal government.

He previously served as the Senior Associate Director for the White House Council on Environmental Quality, the Environment and Natural Resources Policy Director for then-Governor Bush, and as an environmental attorney with the law firms of Bracewell & Patterson and Howrey & Simon in Washington, D.C. and Austin.

What you Need to Know About Energy 2004

Who: Since 1998, the U.S. Department of Energy's Federal Energy Management Program has sponsored an annual workshop for energy managers and others involved in saving energy in buildings. The U.S. Department of Defense and the U.S. General Services Administration are co-sponsors. The program has grown each year in the number of sessions, exhibits and attendees. Last year in Orlando, more than 1,400 people attended dozens of presentations in 12 technical tracks and visited more than 150 exhibit booths. Energy 2004 is shaping up to be even more spectacular with its location in the heart of the populous northeast United States and the strong program put together by the organizing committee.

What: This is the seventh annual national energy management workshop and exposition... Attendees include federal, state, local and private sector energy managers, procurement officials, engineers and architects, energy service companies, transportation officials, utilities, and others involved in energy management around the country. Here is your opportunity to learn about the latest cost-effective and most energy-saving renewable energy and water efficiency products and equipment. By applying the strategies, products, equipment and services demonstrated at Energy 2004, you can improve the comfort, security, productivity and reliability of your facility and employees.

Where: You'll appreciate the choice of Rochester as the site of this year's workshop from the minute you get off your plane and see the exhibits in the airport terminal on

their Combined Heat and Power Cogeneration plant that produces most of the airport's electricity as well as hot water for building heating and cooling. There are a number of renewable energy sites in the area, along with energy-efficient buildings and facilities. The workshop and exposition will be held at the Rochester Riverside Convention Center in the heart of downtown, just 10 minutes from the Rochester airport. Hotel room blocks have been arranged with three hotels located just minutes from the Convention Center: the Clarion Riverside Hotel



(585-546-6400, 888-596-6400), Crowne Plaza Hotel (585-546-3450, 800-2CROWNE) and Hyatt Regency Hotel (585-546-1234, 800-233-1234). You can register directly with the hotels from the Energy 2004 web site. All rooms are at the \$83 government rate. Be sure to ask for the "Energy 2004" rate when making your reservation. Note that all three workshop hotels offer their guests free shuttle service from the airport. Call them from the special phones in the baggage area when you arrive in Rochester.

When: The program begins with optional technical tours on Sunday, August 8, and an opening reception in the Exhibit Area that evening at 5 p.m. It concludes at 2:30 p.m. on Wednesday, August 11, following the Closing Plenary Luncheon. This year's program follows the format of the previous workshops, with a Monday morning plenary session, product/service exposition through Tuesday and 63 presentations in eight specialized technical tracks through Wednesday. There will also be several networking events and optional technical tours, as well as a number of optional pre- and post-workshop programs and special sessions. Check the web site for full details on all activities.

Why: Energy 2004 is designed to help you do your job better by giving you details on the latest energy-saving strategies and products, opportunities to network with your colleagues to discuss new applications and strategies, and information from the experts on successful case studies and projects.

Cost: The registration fee is \$465 for registrations postmarked by July 8 and \$565 after that date. There is also a team discount of \$420 per person for groups of four or more from the same organization, postmarked by July 8. One-day registrations are available for \$365. The workshop registration fees include all sessions, breaks, breakfasts and lunches, social functions, handout materials and admission to the exposition.

How to register: The easiest and most secure way to register is online with a credit card on the secure web site. You can also fax your registration form and credit card or other payment information or mail the form and payment information. If you have any questions or need more information, call JoAnn Stirling toll-free at 800-395-8574 or email energy2004@fsec.ucf.edu.

For full information: Full details on the sessions, special events, tours, and other activities, along with a list of Frequently Asked Questions, are available at the workshop web site: www.energy2004.ee.doe.gov. Check this site often for information. Be sure to read the online Frequently Asked Questions, information on airline



discounts for non-federal attendees, and other information for attendees. Most of your questions should be answered by looking through the web site, but you can call 800-395-8574 or 321-638-3433 if you need more information.

For information on sponsorships of Energy 2004, contact Ken Sheinkopf at 321-638-1007 or Sheinkopf@fsec.ucf.edu.

For information on exhibiting at Energy 2004, contact Exhibit Promotions Plus at 410-997-0763 or energy@eponline.com.

Note: the opinions and views expressed at the workshop and the optional workshop programs are not necessarily to be interpreted as official endorsement by the U.S. Department of Energy, U.S. Department of Defense or the U.S. General Services Administration. Also, no representations, warranties or endorsements should be implied or inferred from the inclusion of a commercial/nonprofit entity in the product/services exposition.

How to Get Your Organization to Send You to Energy 2004

In these days of tight travel budgets, it's important that a program like Energy 2004 offers you enough benefits to justify your time and expense.

We've received ideas from previous attendees on suggestions for getting your boss to approve your participation in our annual energy workshop. Follow these ideas for some help in getting the funding and approvals you need to join your colleagues at Energy 2004 this summer. Write a request to your supervisor and:

- *Identify the sessions that will improve your job performance and benefit your organization.*
- *List sessions you want to attend and what you hope to learn.*
- *State how you plan to apply these to your organization's needs.*
- *Demonstrate how you will share with your organization the valuable sessions and networking information.*
- *Emphasize the low registration price compared to similar workshops elsewhere, and why Energy 2004 is a real bargain for a three-day workshop with more than 20 hours of training. (The average cost of a three-day workshop and exposition often runs \$700 to \$1,000).*
- *Encourage the formation of agency teams for successful workshop participation. Stress the advantage of team price discounts for four or more participants.*
- *Explain how a hands-on exposition, with suppliers of cutting-edge technology products, will benefit your organization.*
- *Show how the opportunity to view and learn about the products and services available will help you make the right procurement choice and satisfy your organizational needs.*
- *Discuss the results of attending and how they may be applicable to your agency's needs, including networking with your agency peers.*
- *Present your request to attend, with this brochure, to convince your supervisor of the benefits of attending. Your organization can save even more money by registering early. Allow plenty of time to get your request through the approval process.*



Who Comes to These Annual Energy Workshops?

Last year, more than 1,400 attendees, speakers and exhibitors came to Energy 2003 in Orlando. Their job titles included federal, state, local government and private sector energy managers; procurement officials; engineers; utility representatives; operations and maintenance managers; government contractors; environmental specialists; state energy office staff; architects; design engineers; facility managers and others.

A breakdown of the organizations the workshop attendees came from included defense agencies; civilian agencies; industry; national laboratories; utilities; state, local and national governments; education; institutes/associations; ESCOs and media.

The Energy 2004 Product/Service Exposition

A highlight of Energy 2004 will be an expanded exposition. Attendees will learn about the latest energy-saving products and services. Exhibitors will have access to a \$10+ billion federal and military market. To obtain exhibit information or to recommend a potential

exhibitor, contact Exhibit Promotions Plus, Inc. (410/997-0763, 301/596-3028, fax 410/997-0764, energy@eponline.com). Updated exhibitor lists will be posted at www.energy2004.ee.doe.gov.

Selected Current/Prior Exhibitors

1E	Eemax Tankless Water Heaters	McConnell Energy Solutions	Siemens Building Technologies
1st Source Lighting	EMC Engineers Inc	McNeil Technologies	Silicon Energy
A&K Energy Conservation	Emerson Climate Technologies	Measuring & Monitoring Services	Solar Outdoor Lighting Inc
Advantek Consulting Inc	Energy Manager By Lifespring	Metal Construction Assn	Solar Turbines Inc
Air Force Civil Engineer	Energy Systems Group LLC	Metaloptics	Solar Unlimited Inc
Air Strata Marketing LLC	Energy User News	Midpoint International	Southern California Edison
Alerton Technologies Inc	Envenergy	Modu-Built Industries Inc	Southern Co Energy Solutions
Alliant-Cogenex	ESRI	Mooncell USA	Southwest PV Systems Inc
Allied Energy Systems	Exelon Services Federal Group	Morgan Stanley	Speakman Company
Ameresco	Falcon Waterfree Technologies	MSC/Bekaert Specialty Films	Spirax Sarco Inc
American Honda Motor Co	Farnsworth Group Inc	Multistack LLC	Square D Company
APC - American Power Conversion	Federal Laboratory Consortium	National Energy Tech Lab (NETL)	STAEFA Control System
Armstrong Service Inc	FEMP's Buying Efficient Prod Prog	National Fenestration Rating Coun	Stingray Lighting
Aspen Systems Corp	First Security Leasing Inc	National Renewable Energy Lab	Strategic Energy
Automated Energy Inc	FLIR Systems	Natural Lighting Co Inc	Strategic Resource Solutions
Automated Logic Corp	Ford Motor Company	Networks Enterprises Inc	Sunwise Technologies
B.I.G. Man (Barton Inv Group Mfg)	Ford's Chilling Filter Co	New York State Energy Research	TAC Americas
Baldor Electric Co	Fuelcell Energy Inc	Noren Products	Take Note Company Inc
Bayview Technology Group	Gas Technology Institute (GTI)	Noresco	Tankless Water Heaters Inc
Bostonia Federal Leasing	GDK International Inc / Uridan	Northern Power Systems	TBC Confuels
Building Green Inc	General Services Administration	Oak Ridge National Laboratory	TCP (Technical Cons Products)
CA Home Energy Efficiency	Geothermal Heat Pump Cons	Obvius	TECO Energy Services
Callabresi Combustion Systems	Global Electric Motorcars LLC	Onity / Sennercom	Teng & Associates
Calmac Manufacturing Corp	Goettl Air Conditioning	Optimum Applied Systems Inc	Tetra Tech EM Inc
Capstone Turbine Corp	Good Steward Software	Pacific Northwest National Lab	The Trane Co
Carmanah Technologies Inc	Graybar Electric Co Inc	Panasonic	Thermo Technologies
Catalyst Power	Guaranteed Systems Inc	Patterson Fan Co Inc	Tiger Natural Gas Inc
CH Guernsey & Co	H2OApplied Technology	Phillips Lighting Co	Total Building Solutions
CH2M Hill	Harding ESE	Piping Technology Products Inc	Toyota Motor Sales
Chevron	Hawker	Platts Research & Consulting	Tridium Inc
Clearwater Inc	Heat Pipe Technology	Power Measurement	Trigen Development Corp
Clough, Harbour & Associates	Heat Transfer Products Inc	Powergy Div of Alco Engineering	Trison Construction Inc
CMS Viron Energy Services	Holophane	Powerlight Corp	Tristram Inc
Co-Energy Group	Honeywell International	PQ Testing & Rentals Inc	Trox USA
Comfort Systems USA	Howard Industries Inc	Prairielands Energy Marketing	Turbocor
Converge Technologies	Ingersoll Rand-Energy Systems	Princeton Energy Systems	US Dept of Energy
Con Edison Solutions	Institute Of Ironworking Industry	Procure Net	US EPA Energy Star Program
Concrete Systems Inc	Intirion / Micro Fridge	PROE Power Systems	United Financial Of Illinois Inc
Constellation Energy Source	Itron	Progress Energy Solutions	United Soybean Board
Controlled Energy Corp	Jessup Manufacturing Co	RF MacDonald Co	Universal Lighting Technologies
Copper Development Assn	Johnson Controls Inc	Radiant Optics	Utilisave LLC
CP Films Inc	KMC Controls Inc	Realenergy Inc	Verdiem (EZ Conserve)
Cristopia Thermal Energy Storage	Kreiss Johnson Technologies	Regency Technologies Inc	WW Grainger
Dean Ryan Corp	Lawrence Berkeley National Lab	RKI Instruments Inc	Wago
Defense Energy Support Center	Leviton Manufacturing Co	Roofmart International	Warner Technologies Inc
Defense Supply Center Phil	Lifesource Water Systems Inc	RTP Company	Water Furnace International Inc
DeMarco Energy Systems	Lightolier IGEN	RWE Schott Solar	Water Management Inc
DuroLast Roofing Systems	Lightstat Inc	Sandia National Laboratories	Waterless Co LLC
Dynamic Energy Concepts Inc	Ludeca Inc	Schott Applied Power	Way2glo Inc
E-Mon LP	Lutron Electronics	Science Applications Intl Corp	Westinghouse
E3 Designs	Mactec Inc	Select Energy Services Inc	World Energy Solutions Inc
Eaton Cutler - Hammer Business	Magna Drive Corp	Sempra Energy Solutions	Xenergy Inc
Eco-Smart Inc	Magnatech	Sepco - Solar Electric Power	York International Inc

Specialized Learning Tracks

Acquisition: Contracting Rules!

Learn what's new in procurement and how to partner with contracting officials.

Energy advocates need to be involved in all stages of an acquisition, from planning and contracting through managing the project. Whether the acquisition involves a building, capital equipment, products or services, everyone needs to be part of the team working with contracting officials to build-in energy efficiency solutions from the start. You will learn from federal procurement officials, management leaders and acquisition experts what it takes to be a partner and what information is essential to ensure that energy is an integral evaluation factor in the procurement process. Those in the know will share innovative ways to find new contracting opportunities. Learn successful strategies for selling your energy-efficient products and services to the government.

Alternative Financing: Making Projects Happen

Whatever your energy goals, you need money to make projects happen.

You can secure financing for energy efficiency improvements through Energy Savings Performance Contracts (ESPCs) and Utility Energy Services Contracts (UESCs), which streamline the process of implementing energy efficiency projects. Regardless of which type of financing mechanism you use, you'll learn to work with private-sector partners to develop a best-value project that addresses your organization's priorities and needs, resulting in projects that are technically excellent, contractually and legally sound and financially smart. You'll build on your agency's project development

“It is really great when one can come to a workshop with questions, receive answers, and leave with a vision. Thanks again!”

Jim Sylvester, U.S. Coast Guard

strengths as we explain and compare such alternative financing options as enhanced-use leasing, explore project success stories, express ideas about financing new and emerging technologies, explode myths about project baseline development, expand the tools in your measurement and verification tool box, and exceed your expectations!

Developing World-Class Operations and Maintenance

Discover how to make your O&M program succeed.

Effective operations and maintenance (O&M) is important to building owners and operators because of its many possible benefits, including energy and cost savings, improved building comfort with reduced occupant complaints, extended equipment life and safer and more reliable operations. However, establishing an effective O&M program can be a complex process that involves many questions and decisions along the way. How well is my O&M program doing? What data do I need? How can I optimize my equipment operation? What are the O&M strategies available to me? How do I build an O&M team? We'll help you start to answer these questions and show you resources that will move you along your way to achieving operational efficiency.

Energy Security: Supply, Technologies and Strategies

Will you have the power when you need it most?

Energy supplies are vulnerable to acts of nature, market forces, terrorism and accidents. You can improve energy security through diversified supply strategies, on-site power and back-up systems. Federal managers will share what worked, what didn't, and what they would do differently next time. Distributed generation and combined heat and power technologies are critical components for reliable, high-quality power. New technologies can reduce costs and emissions while preparing infrastructure for the clean fuels of tomorrow. Learn about the latest issues in the electric and gas markets. See how changing markets and fuel prices affect your choices. Hear about costs and performance data for today's technologies such as gas turbines, internal combustion engines, fuel cells and micro-grids. Discover how to tap resources and use guidelines to determine how to meet your energy security needs.

New Technologies: Successful Applications for Buildings and Vehicles

Critical information to help you meet your energy goals.

Learn about the latest trends in energy-efficient technologies in both building applications and transportation. Find out what you can do to maximize energy savings in building lighting retrofits while ensuring both the desired quality and quantity of light. Hear about cooling technologies to achieve optimal performance for both efficiency and comfort and explore the most practical systems for your facilities. You will be introduced to the latest and best technologies that can be applied in new construction and retrofit projects. Topics to be discussed include integrated open control systems, lighting, cooling and conditioning, energy storage, the building envelope and humidity control. You'll also get current information on today's best transportation choices in alternative fuel technologies that will reduce our dependence on foreign oil and help our environment.

Policy, Planning and Leadership

A smorgasbord of topics and information to meet your leadership challenges.

Solving the technical challenges of your energy project is critical, but you need more to be truly successful. Understanding funding and budgeting challenges, developing strategic plans and getting buy-in from important players can make or break a project. We will look at these topics, as well as how to gain positive reviews and win awards for successful projects. This diverse track is jam-packed with a variety of topics from the "energy basics" to the policy implementation of the energy efficiency provisions in the Energy Bill. And don't miss the chance to meet and ask questions of the new DOE FEMP Acting Program Manager.

Renewables: Real, Relevant and Affordable

Learn how renewables can help preserve the environment and reduce reliance on energy imports.

Renewable energy is practical, competitively priced and environmentally clean. The wind industry produces energy at very competitive prices while solar technologies are being brought into homes and offices. Wastes that would otherwise become pollutants produce



heat and power, while energy from the earth provides electricity and heats and cools homes and buildings. All these strategies save fuel and dollars while reducing maintenance. Meanwhile, growth in demand for natural gas is causing a major expansion of facilities to import liquid natural gas, creating higher costs and a new reliance on imports to parallel that of oil. With abundant renewable energy resources available, now is the time to reverse America's reliance on foreign energy imports to secure our nation's energy future.

Sustainability: From Dreams to Operations

Creating and operating high performance buildings through sustainable design.

Sustainable design and development involves the balance of economic, environmental and social considerations, but keeping that balance throughout the life of a facility can be a major challenge. Sustainable design principles have been applied to many buildings, resulting in reduced operation costs, reduced energy consumption, reduced environmental impact and increased worker productivity. Find out how to successfully take your dream of a high-performance building that will operate in a sustainable fashion and make it a reality. Using examples of new and existing building experiences, experts in sustainable design and operations will address the common challenges of planning, budgeting, designing, constructing and operating sustainable buildings.

Descriptions of all workshop sessions are listed by track on pages 10 - 30. Visit the website for updated information.



Sessions-at-a-Glance

Track	Acquisition: Contracting Rules!	Alternative Financing	Developing World- Class Operations and Maintenance	Energy Security: Supply, Technologies and Strategies	New Technologies Successful Applications for Buildings and Vehicles	Policy, Planning and Leadership	Renewables: Real, Relevant & Affordable	Sustainability: From Dreams to Operations
10:30 a.m. to 12 p.m. <i>Session 1</i>	Alternative Fuel Vehicles and Hybrids: Policy, Obstacles and Solutions	New Concepts: ESPC Financing Costs	Benchmarking: Grade Your O&M Program	Mission Readiness: When the Grid Goes Down, Can You Keep Going?		Starting with the Basics	Strategies for Buying Renewable Energy — It's Easy When You Know How	Integrated Sustainability Planning and Design
2 to 3:30 p.m. <i>Session 2</i>	New Tools and Opportunities for Energy Procurement	The Basics	Essential Elements of a Cost-Effective Metering Program	The Shocking Truth About Electricity		Energy Legislation and Federal Mandates	Solar Energy: A Sunny Future	Making and Selling the Business Case
4 to 5 p.m. <i>Session 3</i>	Regulations: What's Hot and What's Not	Enhanced-Use Leasing in Practice	Energy Savings Through Improved O&M Contracts	Reading the Crystal Ball: Future Trends in Natural Gas		Strategic Energy Planning	On-Site Wind Generation: Now Within Your Reach	Sustainable Design: A View From the Top
TUESDAY								
8:30 to 10 a.m. <i>Session 4</i>	Sustainable Purchasing Show and Tell: Shop Green, Save Green	Comparing Alternative Financing Options	Tuning-Up Through Retro-commissioning: How and Why	Dangerous Addiction: Are You Gambling on Energy Reliability?		Funding Your Energy Project	Biomass to Energy: Don't "Waste" the Opportunity	Sustainability 101

10:30 a.m. to 12 p.m. <i>Session 5</i>	Energy and Procurement: Getting Along Leads to Success	ESPC Success Stories	How to Optimize Your Building Controls	Lessons Learned: Comparing Options for Energy Assurance	Alternative Transportation Technologies	Project Planning and Getting Buy-In	Sustainability Beyond Energy
	Will Your Program's Funding Survive?: Energy Program Performance Assessment	UESC Success Stories	Hands-on Retro-commissioning: Let's Get Dirty!	CHP Basics: Balancing Heat, Power and Budgets	Cool Connections: Comfort, Energy and HVAC	New York Leadership	Managing and Operating a Sustainable Facility
	DoD Utilities Privatization Update	Setting the Bar: Establishing Energy Baselines	Dispel the Myth that Maintenance is Just an Expense	Strategies to Manage Fuel Risks		Bragging Rights for Your Project	Performance Metrics
WEDNESDAY							
8:30 to 10 a.m. <i>Session 8</i>	Contracting for Renewable Energy	Financing New and Emerging Technologies	Maintenance Technologies That Really Get the Job Done	Where the Action Is: State Roles in Funding, Permitting and Interconnection	Open Up Your Control System: The Winner is — You!	The Latest and Greatest: Thinking Outside of the Box	Doing It Right From the Start
	Greening and Growing Your Own Service Contracts	Managing Risks: Better Measurement and Verification	Training: The Overlooked Opportunity for O&M Savings	Technology Update: Brave New World for Energy Security	LED Lighting: The Latest Eye-Opening Developments	Plug Into What's New	Working With What You Have

Icons

We've added something new this year to help you better plan a workshop course curriculum matched to your personal needs and experience. Check out the icons that appear before the descriptions and you'll have more information on the content and focus of the sessions.

Audiences



Energy 101



Advanced Concepts



General Audiences

Session Content



Contacts



Hands-on / Operations



Legal Issues



Technical

Monday, Session 1: 10:30 a.m. – 12 p.m.

Alternative Fuel Vehicles and Hybrids: Policies, Obstacles, and Solutions



Intent: To increase use of alternative fuels in government vehicles and hybrids.

Description: Building an efficient fleet requires a supporting infrastructure, so solutions to help overcome this initial investment obstacle will be offered. Learn how to buy alternative fuel vehicles and hybrids. Find out what is available from the General Services Administration, their extensive leasing program, and alternative fuel choices for all makes and models. Become aware of procedures required to meet current and future mandates. Learn how a successful Marine Corps program was implemented, lessons learned, how they exceeded their goals, and the special awards and recognition they obtained. Gain an understanding of future vehicle technology, the state of the industry, and future challenges industry faces.

Presenters: Russ Pentz, General Services Administration; Tom Smallwood, U.S. Marine Corps

Monday, Session 2: 2 p.m. – 3:30 p.m.

New Tools and Opportunities for Energy Procurement



Intent: To break the “glass ceiling” surrounding business opportunities and acquire and use new procurement tools and techniques.

Description: Discover how to increase federal government purchases of energy-efficient products and services. Learn to master new government contracting tools such as e-Buy, reverse auctions and SubNet. Come and learn how to locate green suppliers on-line and gain valuable information that will enhance your ability to meet your subcontractor goals. Find out how the newest procurement techniques are being used in the design and construction of new federal buildings. Hear experienced contracting personnel tell you how to break the barriers to buying green. Learn about one of the best kept secrets in procurement, a veritable smorgasbord of procurement opportunities right at your fingertips.

Presenters: Matthew Urenezis, General Services Administration; Linda Mesaros, Mesaros Associates, Inc; Richard Domaleski, World Energy Solutions, Inc.

Monday, Session 3: 4 p.m. – 5 p.m.

Regulations: What's Hot and What's Not



Intent: To provide information about procurement regulations affecting energy management and operations.

Description: Become informed about current legislative proposals and Administration procurement and management initiatives impacting energy efficiency issues. Learn the status of new regulations. Gain a perspective on the relationship between the federal government's purchasing power (\$250 billion) and federal energy management projects and contracting vehicles. Find out how it affects you as you navigate your way through what are often perceived as confusing and overlapping mandates. Use this information to update and shape up your energy program planning, implementation and execution. Find out from a New York representative the latest information on state and local governments and their energy purchasing programs. Examine how your state or local government matches up in terms of being aggressive and proactive.

Presenters: Stan Soloway, Professional Services Council; Matt Brown, New York State Energy Research and Development Authority

Tuesday, Session 4: 8:30 a.m. – 10 a.m.

Sustainable Purchasing Show and Tell: Shop Green, Save Green



Intent: To showcase cost-effective energy-efficient, biobased, and Energy Star products and services.

Description: Have you ever seen or actually touched an energy-efficient, biobased, or Energy Star product? This is your chance to learn about these products and examine them up close. Hear briefly about the laws, Presidential initiatives and policies that require purchasing of these products. Find out where they are commercially available, how they can be cost effective, and whether they perform as well or better than their counterparts. Examine the showcased products and see biobased products that include pens and t-shirts made from corn, post office walls made from straw and cleaners made from the pulp of oranges. Gain information on energy-efficient products, low-energy standby power devices and Energy Star equipment. You will also get exhibit and booth information on energy-efficient, biobased, and Energy Star vendors at Energy 2004 so that you can obtain samples of many of these products and meet the vendors who sell them.

Presenters: Joan Glickman, Department of Energy; Mike Green, Department of Agriculture; Dan Manternach, Biobased Manufacturers Association; Maureen McNamara, Environmental Protection Agency



Energy 2003 gave me an opportunity to meet other energy professionals and provided me valuable information to help me with my energy management responsibilities.

Joe Kanosky, DOE/NETL



Tuesday, Session 5: 10:30 a.m. – 12 p.m.

Energy and Procurement: Getting Along Leads to Success



Intent: To demonstrate successful procurement and energy partnerships.

Description: Federal agencies face many hurdles when trying to incorporate energy aspects into the procurement and contracting process. Ever feel like the contracting officer is speaking a different language than you? Do you as a contracting person understand what the energy and facilities managers are trying to achieve? Hear how procurement and energy teams have merged their respective terminology, communities and methods of operation. Find out how to get your contracting officer's attention on your energy projects. Learn what energy managers really need from procurement and contracting personnel and gain valuable success stories and lessons learned that you can actually put into action. This is a "must" for people who are seeking to forge a strong and successful energy and procurement partnership.

Presenters: David Boyd, Department of Defense; Sharon Holcombe, Department of Agriculture; Mike Friedman, Air Force Reserve; Richard Wickman, National Aeronautics and Space Administration

Continued

Acquisition continued

Tuesday, Session 6: 2 p.m. – 3:30 p.m.

Will Your Program's Funding Survive?: Energy Program Performance Assessment



Intent: To understand the new metrics by which your program and its funding will be evaluated.

Description: Become “PART” of the solution for improving government performance and accountability. The Performance Assessment Rating Tool (PART) is used by the White House Office of Management and Budget to assess programs in the areas of strategic planning, management and results. Learn how to improve your rating and how to survive in this new world of program assessment. Hear how programs are scored, get an overview of how PART works and find out about its applicability and potential impacts on the future of your program. Gain first-hand knowledge of how one agency energy program received an increased budget of 60 percent after a successful PART review. Find out what the Federal Energy Management Advisory Council found in its independent assessment of the FEMP program in 2004.

Presenters: Rob Sandoli, Office of Management and Budget; Get Moy, Department of Defense; Dick Earl, PB Facilities, Inc.

Tuesday, Session 7: 4 p.m. – 5 p.m.

DoD Utilities Privatization Update



Intent: To provide an update on privatization and discuss significant improvements to acquisition regulations.

Description: Find out the latest on utilities privatization, a major Presidential initiative. Learn about solicitations on 900 utility systems representing one-third of the \$50 billion of utility assets controlled by the DoD. This represents a tremendous opportunity for utility firms and non-traditional utility firms, finance providers and electrical and mechanical subcontractors. The focus of the utilities privatization program is to upgrade DoD systems to new levels of readiness with significant cost avoidance. Gain the latest on improvements to the Federal Acquisition Regulation, which will allow utility providers to more effectively use their current business models in their proposals. Hear from a utility industry representative on how to achieve a successful partnership with DoD and lessons learned in overcoming impediments.

Presenters: CAPT Rick Marrs, Department of Defense; Steven J. Allenby, United Financial of Illinois

Wednesday, Session 8: 8:30 a.m. – 10 a.m.

Contracting For Renewable Energy



Intent: To provide successful contracting methods and techniques for purchasing renewable energy.

Description: Purchasing of renewable energy products and services is an area that most acquisition personnel know little about. Information will be provided on successful purchasing programs in this field. Learn how to competitively buy renewable energy and have your questions answered on how you can do it right. Gain information from the largest purchaser of wind power in the U.S. on how they did it. Hear from a contracting officer how to overcome barriers and obstacles to buying renewable energy and be privy to easy solutions and lessons learned. If you have any interest in purchasing renewable energy, being here is a must.

Presenters: Tom Denslow, U.S. Air Force; Brian Magden, General Services Administration; John Nelson, Defense Energy Support Center

Wednesday, Session 9: 10:30 a.m. – 12 p.m.

Greening and Growing Your Own Service Contracts



Intent: To show how you can add energy standards and requirements to service contracts.

Description: Federal service contracts account for more than \$100 billion each year, yet the great majority of these contracts do not incorporate energy standards or language. Learn from those who have “greened” their service contracts. Find out how the Pentagon is being renovated incorporating energy standards. Obtain a sample of the new “green” lease that is being used by the General Services Administration. Hear from one of the most innovative and proactive “greening” agencies on how they have added standards and requirements to help further their mission while still focusing on cost-effectiveness. You will be provided with actual sample standards and language.

Presenters: Robert Cox, Department of Defense; Don Horn, General Services Administration; Chris Kearney, Department of the Interior

Alternative Financing

Monday, Session 1: 10:30 a.m. – 12 p.m.

New Concepts: ESPC Financing Costs



Intent: To highlight immediate actions agencies can take to address project financing costs.

Description: “Costs and time required to receive an award from an agency customer are excessive” is a widespread energy service company (ESCO) perception. Agency customers believe that spending more for projects and then financing them at high rates is not a good deal for the government, and sufficient backup information, transparency and due diligence are required before prudent awards can be made. A FEMP-sponsored task force has been wrestling with these and other project financing issues and identifying ways to reduce financing costs on alternatively financed projects. Leaders from the FEMP ESPC Financing Task Force will discuss immediate actions agencies can take to address financing costs.

Presenters: Skye Schell, Department of Energy; Joyce Ziesler, Department of Energy; Patrick Hughes, Oak Ridge National Laboratory

Monday, Session 2: 2 p.m. – 3:30 p.m.

The Basics



Intent: To explain the available contracting vehicle options and how to use them to get your project started.

Description: Come and hear details of how each contracting vehicle works. Panelists will cover DOE’s Super ESPC (from the program’s contracting officer), the U.S. Army Corps of Engineers ESPC program (from the program lead), the Utility Energy Service Contract Basic Ordering Agreements (from an award-winning Navy contracting officer) and the General Services Administration’s Area-Wide contract (from the program lead). You will gain the information necessary to choose the contract vehicle that best fits your needs. Meet the key people to help you with any option you choose and find out where to get help as you get started down the path to a successful energy project at your facility. If you’re an energy/facility manager or an agency contracting/procurement official, you should be here.

Panelists: Joyce Ziesler, Department of Energy; George Sledge, U. S. Army Corps of Engineers; Ed Thibodo, U. S. Navy; Mark Ewing, General Services Administration

Monday, Session 3: 4 p.m. – 5 p.m.

Enhanced-Use Leasing in Practice



Intent: To describe how enhanced-use leasing is used to get federal projects in place.

Description: The Department of Veterans Affairs has successfully executed, through public/private venture, enhanced-use leases for the development, construction and operation of self generation state-of-the-art co-generation energy plants at the VA Medical Center, North Chicago, IL, and the VA Medical Center, Chicago (West Side Division), IL. These energy ventures were financed through a unique alternative financing structure that utilized municipal bond financing, thus minimizing construction and financing costs. The Department is also exploring other alternative financing structures to accomplish its enhanced-use leases for energy as well as recent legislative changes to VA’s enhanced-use statute. These changes streamline its process, allowing these enhanced-use public/private ventures to effectively provide operational cost savings and cost avoidance with a lower than market energy rate at minimal risk. You will also hear from the U.S. Air Force with an update on their enhanced-use leasing projects and about the opportunity to submit proposals for energy projects at Air Force facilities under this authority.

Presenters: Edward Bradley, Department of Veterans Affairs; Rich Jenkins, U. S. Air Force

“

In the opening plenary, Assistant Secretary Garman spoke about ‘Energizing the Mind.’ I feel that Energy 2003 met with this objective — We go back to our work place ‘Energized’.

*Bob Grieves, U.S. Naval Activities,
United Kingdom*

”

Continued

Alternative Financing continued

Tuesday, Session 4: 8:30 a.m. – 10 a.m.

Comparing Alternative Financing Options



Intent: To help you determine what contract authority might work best for your projects.

Description: Does it feel like alphabet soup sometimes with ESPCs and UESCs? What are the real differences in these two contract authorities? Where are they similar? Why do some agencies (and even sites) use one authority for some projects, and the other for different projects? You will hear from experienced agency contacts as well as get the ESCO and utility perspective on these alternative financing contract tools through this dynamic panel discussion. Bring your questions from A-to-Z and a big spoon to slurp up the alphabet soup! Leave with a better taste of your options so you can move forward on your energy projects.

Panelists: Kelly Dowd, Defense Energy Support Center; John Mitchell, ConEdison Solutions; Brian Magden, General Services Administration; Ed Anderson, Florida Power and Light



Tuesday, Session 5: 10:30 a.m. – 12 p.m.

ESPC Success Stories



Intent: To share lessons learned from successful ESPC projects.

Description: Agency and ESCO experts leading successful ESPC projects will share the details of how they made these projects work at their facilities. With geothermal heat pumps, building automation systems, lighting upgrades and a phased approach for a landfill gas-to-energy project, Ft. Monmouth's \$25+ million project was awarded with rapid cycle time of 98 days from project inception to award. The resulting project represents an annual cost reduction of more than \$1.7 million annually in energy and maintenance savings. Come hear the strategies involved in keeping the ball moving through the Department of Army's chain of command, Defense Energy Support Center approval process and then Congressional Notification. You will also learn about the Federal Correctional Institute - Victorville (CA) project, which incorporates 750-kW of wind power and a photovoltaic carport array in an innovative ESPC at a new facility. It's a Bureau of Prisons showcase project with lots of news you can use.

Presenters: James Ott, U. S. Army; Noel Fenlon, Bureau of Prisons; Scott Debenham, NORESKO, LLC.

Tuesday, Session 6: 2 p.m. – 3:30 p.m.

UESC Success Stories



Intent: To share lessons learned from successful UESC projects.

Description: You will glean tips and strategies on planning and managing UESC projects from the experts. The Naval Station - Great Lakes, IL, won a 2003 Federal Energy and Water Management Award for its UESC project using the GSA Area-Wide contract. The station is now saving \$790,000 per year.

A wide variety of energy improvements were implemented on 34 buildings including direct digital controls, HVAC upgrades and more. Coordinating the involvement of various site tenants and switching from monthly to annual payments were two special challenges you will hear about. You will also hear an overview of the Bonneville Power Administration option and its application to a DoD facility in the Pacific Northwest.

Presenters: George Wokoma, U. S. Navy; Tim Scanlon, Bonneville Power Administration

Tuesday, Session 7: 4 p.m. – 5 p.m.

Setting the Bar: Establishing Energy Baselines



Intent: To give federal energy and facility managers some tips and strategies on effectively establishing project baselines.

Description: How do you know you achieved the energy savings you had planned for? Properly establishing energy baselines before the project begins is a key, though often slighted, first step in assuring a successful pay-from-savings project. We will review options and examples in project baseline planning. Lessons learned from example projects will be shared. What weaknesses and strengths in establishing project baselines have been found? Adjustments to baselines - Where? Why? How? We will also look at project baselines for primary energy conservation measures.

Presenters: Phil Voss, National Renewable Energy Laboratory; John Shonder, Oak Ridge National Laboratory

Wednesday, Session 8: 8:30 a.m. – 10 a.m.

Financing New and Emerging Technologies



Intent: To highlight ways alternative financing can be used to get new, emerging or niche technologies in federal sites.

Description: Come learn about FEMP's Technology Transfer Initiative and how it might help you incorporate new, emerging or niche technologies at your federal site through alternative financing. You will also learn from an innovative project incorporating emerging technologies at federal facilities using alternative financing. Hill Air Force Base was the pioneer customer of FEMP's Biomass and Alternative Methane Fuel Technology-Specific Super ESPC. What was involved in getting that project in place? How is it performing?

Presenters: Brad Gustafson, Department of Energy; Kent Nomura, U. S. Air Force



Every year the Energy 200X workshop gets bigger and better. This has become THE opportunity for me to come up-to-date on new technologies and programs. Thanks!

Andy Walker, NREL



Wednesday, Session 9: 10:30 a.m. – 2 p.m.

Managing Risks: Better Measurement and Verification



Intent: To provide you with an overview of FEMP tools and resources to help improve measurement and verification.

Description: Want some help making sure your guaranteed savings are achieved down the road? We will begin with an overview of FEMP's Measurement and Verification (M&V) tools, and will provide a handout that briefly describes the resources available to help federal agencies with M&V of alternatively financed projects. Guidance on managing risks in ESPC and UESC projects will be provided through an examination of the Risk Management Matrix. We will also discuss how the Detailed Guidelines to FEMP M&V Option A can help agency customers and ESCOs to use stipulated values in the right way. Additionally, an M&V case study incorporating the newly developed standard M&V document outlines will be discussed.

Presenters: Steve Dunnivant, EMP2, Inc.; Mark Stetz, Nexant; Venkat Kumar, Johnson Controls, Inc.

Developing World Class Operations and Maintenance

Monday, Session 1: 10:30 a.m. – 12 p.m.

Benchmarking: Grade Your O&M Program



Intent: To introduce benchmarking as a tool for improving building performance.

Description: Benchmarking provides a way to determine how well a building is performing in terms of energy use, and it helps facility managers set targets for improved performance. Since O&M of building mechanical/electrical systems is critical to realizing energy efficiency and optimal building performance, benchmarking your building can be your ally in reaching energy and customer satisfaction goals. Find out how to develop a benchmarking program that will help you reach your facility's energy and O&M performance potential.

Presenter: Keith J. McClanahan, Facility Issues

Monday, Session 2: 2 p.m. – 3:30 p.m.

Essential Elements of a Cost-Effective Metering Program



Intent: To demonstrate how to get a metering program in place.

Description: Energy use metering is an essential component of an effective O&M program. Metering can provide a wealth of information that is necessary to effectively monitor equipment performance as well as track and manage energy use. Developing a metering strategy and program that best fits your needs is a crucial first step, followed by developing the justification that will help win funding support. Join us to learn how to clear these hurdles so you can move closer to that metering program you need.

Presenters: Natale DiDonato, ConEd Solutions; Jon Duke, Tetra Tech EM, Inc.



Monday, Session 3: 4 p.m. – 5 p.m.

Energy Savings Through Improved O&M Contracts



Intent: To discuss and brainstorm ways to make O&M contracts more effective.

Description: Since the majority of federal building O&M is outsourced, efforts to improve federal energy efficiency and building performance must address the O&M requirements contained in contracting agreements. We'll discuss the factors that differentiate performance-based from detailed specifications and give you the opportunity to apply them to your own circumstances. The benefits of performance-based contracts relative to energy efficiency and building performance from both the owners' and providers' points of view will be presented. You will have the opportunity to share your own ideas as well.

Presenters: Roman Piaskoski, General Services Administration; Ed St. Germain, Enviro-Management & Research, Inc.; Bob Heller, Johnson Controls, Inc.

Tuesday, Session 4: 8:30 a.m. – 10 a.m.

Tuning-up Through Retro-commissioning: How and Why



Intent: To introduce building retro-commissioning protocols and practices and identify the benefits.

Description: Retro-commissioning is all the rage in the “O&M for energy efficiency” arena, and rightfully so based on the results to date. One of the building blocks for effective retro-commissioning is standardized and accepted protocols. Learn about available protocols, where to find them, and how to use them. Gain an understanding of the technical skills and equipment required to make effective retro-commissioning happen. Better understand the economics of retro-commissioning and how to pre-screen buildings to select the best candidates. Find out how to promote a retro-commissioning policy at the agency and facility levels based on economics, occupant satisfaction and needs, and risk mitigation.

Presenters: Adam Hinge, Sustainable Energy Partnerships; Tudi Haasl, Portland Energy Conservation Inc.

Tuesday, Session 5: 10:30 a.m. – 12 p.m.

How to Optimize Your Building Controls



Intent: To introduce common commercial building controls systems and their applications.

Description: Building controls are the key components in the effective operation of building equipment. Controls make the equipment function by providing the interface between humans and machines. Effective use of building controls requires skilled building operators who know the building’s operating requirements and the equipment’s capabilities, and who understand the capabilities and maintenance requirements of the control systems. Experts will discuss capabilities of some of the more common commercial building controls and their applications, identify some of the most under-utilized control features (that wind up costing users energy and dollars), and demonstrate how some controls work – and don’t work.

Presenters: Bob Schultz, TAC Americas; Dan Turner, Texas A&M University

“

It was a revitalization week
at Energy 2003.

*Terry Honderich
Navy PWC, Norfolk, VA*

”

Tuesday, Session 6: 2 p.m. – 3:30 p.m.

Hands-on Retro-commissioning: Let’s get Dirty!



Intent: To show up-close what’s really involved in retro-commissioning.

Description: After all the talk about how to retro-commission, we’ll get a chance to take a crack at it. We will visit two of the Riverside Convention Center’s mechanical spaces to watch a live assessment and discovery led by retro-commissioning experts. We’re sure that our attendees, as well as the Convention Center staff, will be surprised by some of the findings that without a retro-commissioning effort would likely continue to result in wasted energy use and poor building performance. Note that attendance may be limited based on mechanical room space availability, so make sure you arrive early to ensure your ability to participate and learn from this valuable opportunity.

Presenters: Michael Weiss, Working Buildings; Darrel Hatley, Pacific Northwest National Laboratory; John McFarland, Working Buildings

Continued

Developing World Class Operations and Maintenance continued

Tuesday, Session 7: 4 p.m. – 5 p.m.

Dispel the Myth that Maintenance is Just an Expense



Intent: To help O&M managers more effectively present resource justifications.

Description: The buildings are always space-conditioned, the lights are always working, and there is hot water in the bathroom. Life must be good! The O&M program must have all the resources it needs to get the job done, or so the budget decision-makers will conclude. The fact is that reductions to O&M budgets reduce the effectiveness of these programs and, in the end, wind up costing more money than they save. Instead, investments in O&M provide many critical benefits including better availability of mission critical systems, increased equipment life, improved safety and reduced energy costs. Learn how to dispel the myth that maintenance is just an expense that can always be cut.

Presenters: Rick Sovic, EG&G Technical Services; Joel Leonard, PulsePointe Technologies LLC

Wednesday, Session 8: 8:30 a.m. – 10 a.m.

Maintenance Technologies that Really Get the Job Done



Intent: To introduce technologies and strategies that are key to a world-class O&M program.

Description: Effective O&M goes well beyond the preventive maintenance strategy we most often hear about. Optimizing resources and identifying potential problems before they happen are keys to having a world-class O&M program, and these goals can become reality at your site with the tools and approaches presented here. Learn how to use predictive maintenance approaches such as infrared thermography, vibration analysis and ultrasonics, and how these approaches can be strategically employed in an O&M program to improve system and building performance, save energy and save money.

Presenter: Naresh Khosla, Enviro-Management & Research, Inc.

Wednesday, Session 9: 10:30 a.m. – 12 p.m.

Training: The Overlooked Opportunity for O&M Savings



Intent: To highlight the benefits of comprehensive O&M training and provide suggestions for improvement.

Description: A successful O&M program has many members on its team including field personnel, office managers, administrators, engineers, and others. Team members need the right resources if they are to provide an effective level of service. One critical resource is proper training of the team members. We will identify training program needs and sources that will keep you and your team members informed of the most current technologies, approaches, and skills that can be taken back to the workplace.

Presenters: Cynthia Putnam, Northwest Energy Efficiency Council; Greg Sullivan, Pacific Northwest National Laboratory



Energy Security: Supply, Technologies and Strategies

Monday, Session 1: 10:30 a.m. – 12 p.m.

Mission Readiness: When the Grid Goes Down, Can You Keep Going?



Intent: To provide the big picture on vulnerabilities to the electric grid and expert advice on energy assurance strategies.

Description: What would an ideal power grid look like? How can we make the best of the one we have? What can history teach us about grid failures and the most effective strategies to prepare for them? Discover why we cannot rely on the grid or the standard UPS and diesel backups to ensure reliability. What do the experts recommend for energy security? Learn about steps you can take to maintain critical mission readiness and initiatives at DOE and FEMP to support energy assurance. Come hear how Homeland Security Directives and related guidance affect energy planning. Learn how your facility fits into the “big picture” and about programs to help state and federal agencies address energy security.

Panelists: Massoud Amin, University of Minnesota; Joan Glickman, Department of Energy

Monday, Session 2: 2 p.m. – 3:30 p.m.

The Shocking Truth About Electricity



Intent: To understand the dynamics of America’s electric supply markets, legislation and strategic trends.

Description: America’s aging electric infrastructure is straining to meet modern reliability, power quality, economic and environmental standards. To meet those challenges, new financial, policy and technological decisions are being made. These decisions come at a price, both in dollars and management burdens — and we need to be informed to be prepared. Blackouts, excessive gas-fired capacity and the triple whammy of Enron, recession and high natural gas prices have increased our reliance on new coal-fired generators with environmental consequences. Are investors, utilities and regulators rethinking nuclear, renewables or on-site power options? What are the impacts of new regulations? You will leave this session with a new understanding of factors that drive electric price, power quality, technology and reliability issues you face every day.

Presenter: George C. Loehr, eLucem

Monday, Session 3: 4 p.m. – 5 p.m.

Reading the Crystal Ball: Future Trends in Natural Gas



Intent: To learn the fundamentals of America’s gas supply, markets, and strategic trends.

Description: Understand natural gas supplies and limits due to depletion and inaccessibility. Is there a crisis? If so, is it long-term? How do people make projections on natural gas futures, supplies and pricing? What is the demand outlook? Are futures prices a reliable predictor of spot prices? What regulatory responses are under consideration? Understand how the economics of gas accessibility affect the development of unconventional gas and the importation of liquefied natural gas (LNG) and the implications of that inevitability. What technologies are available to develop new gas supplies? Get expert guidance to transform gas price headlines into a perspective that will help you make better decisions.

Presenter: Andrew D. Weissman, Energy Ventures Group, L.L.C.

“

This is my 4th Energy workshop and it is one I will always try to attend. Very good and very well organized.

Carol Lautzenheiser, GSA

”

Continued

Energy Security: Supply, Technologies and Strategies continued

Tuesday, Session 4: 8:30 a.m. – 10 a.m.

Dangerous Addiction: Are You Gambling on Energy Reliability?



Intent: To learn about federal requirements and lessons on improving reliability from successes and failures.

Description: What can you do to be prepared in the event of a blackout? What are the federal requirements for reliability and continuity of operations? Become acquainted with federal policies requiring emergency plans to assure power for critical loads. Hear about why systems fail and understand reliability terminology. Learn about methods you can use to improve reliability including strategies that incorporate distributed generation. Get an overview of the broad array of commercially available technologies and services that may cost less, work better and improve the environment as compared to your present approach. Learn from recent studies of success and failure, including sectors that demand secure supply such as health care and data centers. Caution: this session may transform your ideas about reliability!

Panelists: Mark Ewing, General Services Administration; Murray W. Davis, DTE Energy Technologies Inc.; Bruce Hedman, Environmental and Energy Analysis Inc.



Tuesday, Session 5: 10:30 a.m. – 12 p.m.

Lessons Learned: Comparing Options for Energy Assurance



Intent: To get details on financing, performance, reliability, costs, benefits, and make-or-break issues from federal case studies.

Description: The Navy will provide an overview of privately financed distributed generation projects including photovoltaic and combined heat and power applications large and small. The General Services Administration will provide an in-depth look at the 10-MW gas turbine CHP project on the Washington, D.C. National Mall which offers lessons for anyone contemplating a large project. Learn what motivated federal managers to proceed with DG/CHP options, how systems met, exceeded or fell short of expectations, and why. Understand the capabilities and limitations of different technologies based on field results. Receive a technology primer comparing cost-per-kW installed, efficiency, reliability, emissions, O&M and savings. Don't reinvent the wheel — come learn from the folks who have "been there, done that!"

Panelists: Darryl Matsui, U.S. Navy; Steven Williford, General Services Administration; Christopher Potter, General Services Administration

Tuesday, Session 6: 2 p.m. – 3:30 p.m.

CHP Basics: Balancing Heat, Power, and Budgets



Intent: To determine if CHP can save you money while helping meet energy efficiency and security goals.

Description: Why is combined heat and power such a hot topic? How can you optimize system efficiency? When is on-site power the best approach to energy security? What are the trade-offs between "backup" power and CHP? How do you get the funding? Get answers about tools and services while learning the basic rules for determining whether DG/CHP offers economic advantages at your facility. Learn how to identify and implement a project and where to go to get assistance and funds. Bonus: learn how to get credit for "site versus source" savings. Bring your questions and get answers from experts to help understand if and when combined heat and power merits consideration, and the resources available to help you develop a successful CHP project.

Panelists: John Cuttica, Midwest CHP Application Center; Larry Tangel, U.S. Combined Heat and Power Association; Gary Morrissett, U.S. Marine Corps; Patrick Hughes, Oak Ridge National Laboratory

Tuesday, Session 7: 4 p.m. – 5 p.m.

Strategies to Manage Fuel Risks



Intent: To learn about hands-on strategies and options to minimize risks from volatile fuel prices and insecure supplies.

Description: Review a matrix of options that can help a site reduce or hedge risks, diversify supplies and minimize costs and vulnerability. Learn who does what at DESC and where you can go to get help with long-term fuel supply and price contracts, hedges, and private alternatives to insurance. Get practical tips from experts on how to keep your fuel prices low. Hear a case study on strategic planning, giving an integrated approach to energy supply and distribution for critical loads including security, water, waste treatment, multiple fuels with multiple uses, and assuring mission preparedness.

Panelists: Pamela Griffith, Defense Energy Support Center; Jim Peedin, Honeywell Integrated Energy Services

Wednesday, Session 8: 8:30 a.m. – 10 a.m.

Where the Action Is: State Roles in Funding, Permitting and Interconnection



Intent: To learn about initiatives that foster clean, efficient energy sources and improved energy assurance through DG/CHP.

Description: A leadership panel will discuss the roles and impacts of state programs on the development of more reliable energy supply with DG and CHP. Learn how regulatory and permitting challenges are being addressed and the catalytic role of state agencies. Learn about the results of NYSERDA's CHP program and the key role state regulators can play in addressing issues such as interconnection rules, standby charges, demand response programs, permits and other incentives. Learn how states in the Northeast are working to promote output-based standards and approaches that help level the playing field for clean, efficient DG/CHP technologies, and where barriers may arise that could stop the show. We'll conclude with a Q&A panel to cover any key topics you need answered.

Panelists: Peter R. Smith, New York State Energy Research and Development Authority; Ken Colburn, Northeast States for Coordinated Air Use Management; Luis Troche, U.S. Environmental Protection Agency; Paul B. Powers, N.Y. State Department of Public Service

“

I have attended the last 4 workshops and they get better each year.

Gene Crabtree
OTS contractor to FAA 58

”

Wednesday, Session 9: 10:30 a.m. – 12 p.m.

Technology Update: Brave New World for Energy Security



Intent: To receive an update on security programs, what new technologies are commercially available, what's working and at what cost.

Description: Get an update on the Department of Homeland Security's infrastructure protection programs, priorities and strategies. Receive the latest information on the status and future prospects for cutting edge technologies to support reliable energy supply, such as stationary fuel cells (including new solid oxide and PEM models), micro-turbines and advances to link systems together in “intelligent” microgrids. Get data on costs, benefits and performance based on the record at federal facilities. Learn about new resources and programs available to continue supporting applied R&D at federal sites. Be briefed on funding available for emerging technologies and discover what's happened with 30 phosphoric acid fuel cells (PAFC) since DoD field tests concluded.

Panelists: Mike Binder, U.S. Army Corps of Engineers; Joshua Meyer, Encorp, Inc.

New Technologies:

Successful Applications for Buildings and Vehicles

Tuesday, Session 5: 10:30 a.m. – 12 p.m.

Alternative Transportation Technologies



Intent: To review alternative transportation technologies and introduce a project involving the development and testing of two types of hybrid vehicles.

Description: Hear the experts describe how alternative transportation technologies play a part in shaping economic, environmental and social conditions. The use of biofuels presents a potential solution to the limitations created by our current reliance on fossil fuels. Learn what resources and conversion technologies are required to produce transportation biofuels such as ethanol, methanol, and green diesel, and explore the advantages and disadvantages of these technologies. Examine the approaches for evaluating the feasibility of producing these fuels for the transportation sector. Hear how the U.S. Postal Service Automotive Engineering group is monitoring two types of hybrid test vehicles for fuel efficiency and emissions: a flexible fuel vehicle for delivery that uses gas and electricity, and a 2-ton mail transportation van that runs on diesel and electricity.

Presenters: Andrew G. Helminger, RTI International; Han Dinh, U.S. Postal Service

Tuesday, Session 6: 2 p.m. – 3:30 p.m.

Cool Connections: Comfort, Energy & HVAC



Intent: To showcase energy-efficient HVAC technologies that make people cool, comfortable and productive.

Description: Learn how to improve energy efficiency and occupant productivity through the application of new HVAC technologies. Newer and better approaches to comfort conditioning are being developed that do more for less. It's up to you to ask for the best available systems. Join us to see what they are, how they work and when they should be used. Learn about the economics of increasing productivity and energy efficiency with HVAC. We will hear about the Navy's Techval program that has validated the energy saving potential of new commercially available energy saving technologies and addressed maintenance issues. Since HVAC contributes to more than half of a facility's energy costs, and comfort affects everyone, there are vital lessons to be learned on the latest-greatest and not-so-great approaches.

Presenters: Paul Kistler, U.S. Navy; Mike West, Advantek Consulting, Inc.; Joe Watson, E3 Designs

Wednesday, Session 8: 8:30 a.m. – 10 a.m.

Open Up Your Control System: The Winner Is – You!



Intent: To give an unbiased look at “open” DDC control systems available on the market and the benefits associated with “opening up” your DDC control system.

Description: BACNet, LONWORKS, ModBus, OPC, Soap, XML... Help! What does it all mean and why should we even care? Learn the difference between vision and reality when it comes to open systems. Experts in the open systems world will lead you down the path of reality as we explore the world of open Direct Digital Control (DDC) systems. You'll learn the benefits and pitfalls associated with migrating your closed DDC system to one that is truly open. In addition, you'll learn the correct way to “open up” your DDC control system to get exactly what you want. Don't miss the boxing match of the century! You be the judge as the underdog “open” DDC system squares off against the traditional closed DDC system.

Presenters: Bob Schultz, TAC Americas; Steve Tom, Automated Logic Corporation

Wednesday, Session 9: 10:30 a.m. – 12 p.m.

LED Lighting: The Latest Eye-Opening Developments



Intent: To discuss the fastest evolving lighting technology — Light Emitting Diodes (LEDs), and explore current and future applications.

Description: Because a significant portion of a facility's energy costs are directly related to lighting systems, it is important to keep abreast of technologies that are becoming available. One of the fastest evolving lighting technologies is Light Emitting Diodes (LEDs). Hear the experts describe how LED technology is playing a part in today's facilities and industries. Understand the overall energy and maintenance benefits being obtained as compared to more traditional lighting technologies, and how to properly use this technology in retrofit and new construction applications. Discover more about the cutting edge LED lighting research and where it can be applied next.

Presenters: Patrick S. Mullins, LuxBright, LLC; Michael Scholand, Navigant Consulting; Kevin Dowling, Color Kinetics

Policy, Planning and Leadership

Monday, Session 1: 10:30 a.m. – 12 p.m.

Starting with the Basics



Intent: To understand the basic federal energy requirements and resources and to help determine which sessions during Energy 2004 are right for you.

Description: Designed to cover the basics of federal energy management, including the requirements and the resources to get the job done. From audits to scorecards, we will explain the fundamental elements associated with energy management at federal facilities. We will also cover resources that are available to you such as training, project facilitators and Resource Energy Managers. Finally, we will guide you through the rest of the Energy 2004 sessions to help you choose what's best for your needs.

Presenters: Gil Siqueido, U.S. Navy; Jim Paton, U.S. Army

Monday, Session 2: 2 p.m. – 3:30 p.m.

Energy Legislation and Federal Mandates



Intent: To gain an in-depth understanding of proposed energy legislation and its impact on federal energy efficiency policies and rules.

Description: Proposed legislation in Congress promises to change policy with regard to federal energy efficiency. Come and get the latest on the status of changes, as well as the program implications. What about renewed ESPC authority? Will we be able to use the new expanded authority for ESPC? How would new metering requirements be implemented? What are the new baseline requirements and how will they work? How would the Advanced Building Efficiency Test Bed program work? What are the proposed new Federal Building Performance Standards? How would the new voluntary commitments to reduce industrial energy intensity work? Leave knowing about these initiatives, how they would be implemented, and how the policy changes would impact federal agency reporting requirements for energy consumption.

Presenters: Cynthia Vallina, Office of Management and Budget; Get Moy, Department of Defense; Brad Gustafson, Department of Energy; Mark Wagner, Johnson Controls, Inc.



Monday, Session 3: 4 p.m. – 5 p.m.

Strategic Energy Planning



Intent: To brainstorm how strategic plans are developed for energy efficiency programs and initiatives.

Description: Our goal is to help you understand how to develop strategic energy plans for your facility. Think about planning the projects you want to implement and how to comply with mandated programs and reports. Consider whether you are taking advantage of all the federal resources available to you, as well as the state-run programs and initiatives. Learn how to develop and implement a strategic plan without getting consumed by the day-to-day demons.

Presenters: Jim Woods, Department of Commerce; Gary Morrisett, U.S. Marine Corps; Mike Gartland, Johnson Controls, Inc.; Stephen Pinkerton, Navigant Consulting

“

Another fine workshop, very worthwhile for my company and for me personally. Energy 200X is my favorite energy workshop.

Jon Duke, Tetra Tech EMI

”

Continued

Policy, Planning and Leadership continued

Tuesday, Session 4: 8:30 a.m. – 10 a.m.

Funding Your Energy Project



Intent: To learn how to make your project a reality and getting the needed funds.

Description: And you thought engineering the project was hard — wait until you try to get funding for it! Do you understand budget scoring? If not, you will after this. We will cover the budgeting process and planning for project funding. If you are considering financing your project, we will cover the process of buying-down an ESPC. We will also present ways to position your project to capture fiscal year-end funds.

Presenters: Chuck Holland, U.S. Army Corps of Engineers; Steve Carter, Department of Defense

“As the low hanging fruit is picked and the benefits realized, this workshop becomes more important to me in identifying new and innovative technologies that will help me meet our energy reduction goals.”

Edward Thibodo, SWDIV, NAVFAC

Tuesday, Session 5: 10:30 a.m. – 12 p.m.

Project Planning and Getting Buy-In



Intent: To learn the elements of a successful energy project and how to get the support you need.

Description: To have a successful project, you need to have all your ducks in a row. You also need to gather support from stakeholders. We will cover the critical elements of successful projects, from justifications to return-on-investment. Can you withstand the tough questions by upper-management? Learn how to gain the critical support and approval from the contracting and legal shops. Learn how to get support from the community at large to help get the plan implemented. We will focus on the fundamental elements in your project and how to gain buy-in from others. We will discuss strategies for best conveying the plan and the benefits it will yield. You will leave ready to initiate effective dialogue that will help make your plan a reality.

Presenters: Cedreck Davis, National Aeronautics and Space Administration; Greg Leifer, National Institutes of Health; Bernie Denno, National Oceanic and Atmospheric Administration

Tuesday, Session 6: 2 p.m. – 3:30 p.m.

New York Leadership



Intent: To illustrate New York's energy policies and practices.

Description: Just about this time last year, the lights were out in New York and much of the Northeast. What efforts were undertaken in New York to alleviate grid congestion and demand in an effort to minimize the severity of the blackout? We will examine the dynamic energy landscape in New York under deregulation and highlight the strategies and techniques undertaken by state government to ensure a reliable and secure energy future. The discussion will include the efforts in New York to adopt a renewable portfolio standard and implement Executive Order No. 111, which mandates efficiency reductions and the purchase of green power. We will also discuss the use of system benefits funds to execute large-scale energy efficiency improvements across all sectors. As New York leads, many states follow. Come and find out why.

Presenters: Peter Smith, New York State Energy Research and Development Authority; Brian Henderson, New York State Energy Research & Development Authority; Gunnar Walmet, New York State Energy Research and Development Authority

Tuesday, Session 7: 4 p.m. – 5 p.m.

Bragging Rights for Your Project



Intent: To discuss ways of spreading the good news on your successfully completed project.

Description: If you want to learn how to get the word out on the positive aspects of your completed project, this presentation is for you. We will instruct you on how to write an award-winning application for a federal energy award. A good project deserves positive recognition. We will focus on developing and publicizing the story of your project, and help you understand how to draft and disseminate a press release. We will also brainstorm other ways to get media coverage for your project.

Presenter: Beth Shearer, Beth Shearer and Associates

Wednesday, Session 8: 8:30 a.m. – 10 a.m.

The Latest and Greatest: Thinking Outside of the Box



Intent: To present unique energy initiatives from several federal agencies.

Description: Looking for something a little different? Want to see some unique ways agencies are dealing with their “energy reduction opportunities?” Want to hear what is happening at the Army, Navy and Air Force? How about the Coast Guard, Federal Aviation Administration, National Oceanic and Atmospheric Administration and others? We’ve brought together an eclectic combination of energy solutions from across the federal government that only thinking out of the box could envision. Come for a whirlwind tour of the best of what is going on throughout the federal government and see where vision can take you.

Presenters: Steve Butterworth, National Park Service; Alvin Day, U.S. Air Force; Paul Fennewald, U.S. Coast Guard; Howard Kernodle, Federal Aviation Administration; Randy Monohan, U.S. Marine Corps; Jeff Seaton, Arizona Army National Guard; William Tayler, U.S. Navy; Minh Trinh, National Oceanic and Atmospheric Administration

Wednesday, Session 9: 10:30 a.m. – 12 p.m.

Plug Into What’s New



Intent: To learn about new programs, people and other resources available from FEMP, GSA and DESC.

Description: Meet the Acting Program Manager of DOE’s Federal Energy Management Program and GSA’s energy expert in the Office of Science, as well as the Deputy Director of Installation Energy at the Defense Energy Support Center. Hear about their priorities and get your questions answered. Learn how these offices can help you with new construction and retrofit projects, procurement of utilities, operations and maintenance needs, utility management and financing options. Get acquainted with the types of technical assistance and training offered and find out who can help you reach your energy management goals.

Presenters: Skye Schell, Department of Energy; Mark Ewing, General Services Administration; Pamela Griffin, Defense Energy Support Center



Renewables: Real, Relevant and Affordable

Monday, Session 1: 10:30 a.m. – 12 p.m.

Strategies for Buying Renewable Energy – It's Easy When You Know How



Intent: To discuss renewable energy purchasing strategies.

Description: Renewable energy can be purchased at reasonable prices, frequently at or near the cost of commercial power. Come hear purchasing experts and a major marketer discuss strategies that bring renewable energy into the grasp of nearly every purchaser. This is a must for both large and small purchasers who will learn how to join in aggregated buys or economical alternatives that make it possible to acquire renewable power in smaller quantities at very affordable prices. The payoff will be an improved environment, less reliance on foreign energy and the bragging rights that you are doing something for our nation.

Presenters: Mike Warwick, Pacific Northwest National Laboratory; Brian Magden, General Services Administration; Ron Kamen, Community Energy

Monday, Session 2: 2 p.m. – 3:30 p.m.

Solar Energy: A Sunny Future



Intent: To address technical and cost aspects of solar technologies.

Description: If you want to find out how solar energy can benefit your operation, this presentation is for you. It will be fast-paced and cover a lot of information, including producing power, heating water, daylighting and preheating building ventilation air. You will learn about the technologies, where they work best, the economics and the pros and cons. Learn how to benefit from state and federal programs and where to get the most current information. There is something here for everyone, perhaps even for your own home.

Presenters: Troy Strand, Independent Energy Solutions Inc.; Bill Black, Sandia National Laboratories; Charles Combs, U.S. Navy

“

I was thoroughly impressed with how organized every facet of the workshop was, from learning tracks to meals. The committee members are to be congratulated for their hard work and its outstanding results — very professional.

Ron Mares, EG&G Technical Services, Inc.

”

Monday, Session 3: 4 p.m. – 5 p.m.

On-Site Wind Generation: Now Within Your Reach



Intent: To demonstrate the benefits of small wind generators to enhance energy security and save money.

Description: Experts will discuss the benefits of installing wind generation on small sites to provide power to facilities or groups of facilities, addressing equipment ranging in size from 5-kW to 750-kW. We'll discuss two radically different wind generator technologies: the familiar horizontal axis machine and the developing vertical axis machine. We will talk about costs, resale strategies, protection from blackouts and much more, showing you the benefits of small wind energy production.

Presenters: Henry DuPont, Lorax Energy Systems LLC; Jacquelin Dery, Dermond Inc.

Tuesday, Session 4: 8:30 a.m. – 10 a.m.

Biomass to Energy: Don't "Waste" the Opportunity



Intent: To discuss the wide range of opportunities for biomass-to-energy projects to save money, gain energy security, maintain price stability and benefit the environment.

Description: Looking for a project that could combine energy security, price stability and all the environmental benefits of renewable energy? Think Biomass! Today, it's the largest source of renewable energy in the country. Come join this multimedia session to learn about the most common types of biomass resources including wood waste, landfill gas and digester gas. You'll see and hear about the benefits, challenges, different technologies and examples of projects that could soon be underway at your facility.

Presenters: Christian Demeter, Antares Group; Chris Voell, Environmental Protection Agency; Craig Hustwit, National Energy Technology Laboratory.

Tuesday, Session 7: 4 p.m. – 5 p.m.

Ground Source Heat Pumps: LEED Friendly, Energy- and Dollar-Saving



Intent: To learn how to achieve Leadership in Energy and Environmental Design (LEED) silver or even platinum certification, save energy, and reduce utility and maintenance costs.

Description: Have fun! Play BINGO and learn. Experts will demonstrate why ground source heat pumps (GSHP) are usually the best energy- and cost-saving heating ventilation and air conditioning systems while simplifying achievement of LEED ratings, including the elusive gold and platinum. Learn from top industry experts the "what," "how" and "where" capabilities of this "older than dirt" technology and how it will work in your commercial building, laboratory, retail building or housing. GSHPs work with single-duct, ceiling plenum distribution, variable-air-volume, multi-zone, reheat, radiant systems and more. They improve indoor air quality and can be effective in preventing mold and mildew growth. Too good to be true? Come and find out!

Presenters: Tony Cooper, WaterFurnace International, Inc.; Steven Ganzer, Tetra Tech EM, Inc.; Eric Oliver, EMO Energy Solutions, Inc.



Sustainability: From Dreams to Operations

Monday, Session 1: 10:30 a.m. – 12 p.m.

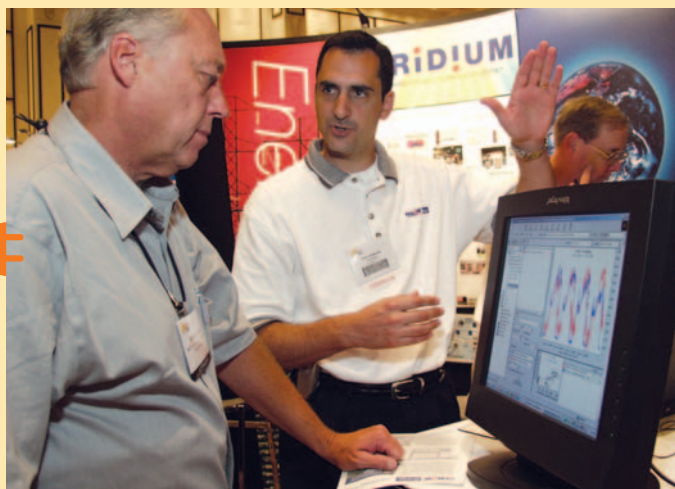
Integrated Sustainability Planning and Design



Intent: To share successful strategies of incorporating sustainability into planning activities.

Description: Federal agencies face many hurdles when incorporating sustainability into planning, design, and operation: competing priorities, first cost and schedule limitations, resistance to change, and more. Come hear what several leading federal agencies are doing to conquer those challenges so that you can use their experience to enhance your program. Leaders at several agencies will be here to provide an overview of their sustainability planning and design activities. They will highlight how their agencies have successfully incorporated the principles of sustainability into their planning and how that has translated into real action.

Presenters: RADM Michael K. Loose, U.S. Navy; Kevin Kelly, General Services Administration



Monday, Session 2: 2 p.m. – 3:30 p.m.

Making and Selling the Business Case



Intent: To demonstrate the economic rationale for investment in sustainable design.

Description: An integrated, sustainable facility design should encompass a facility's functional objectives while balancing economic, "quality of life" and environmental considerations. The questions most often asked are: "How do I get everything when I have a limited budget and schedule?" and "How do I know what I am doing will really cost less over the life of the facility?" Two techniques to address these important questions will be shared. GSA is developing a uniform application guideline for addressing competing facility demands while meeting the goal of LEED Silver Certification. Life-cycle analysis is another systems approach being used to more clearly define the reduced long-term costs of design features. Both of these tools can assist you in promoting and justifying sustainable design in your facilities.

Presenters: David Eakin, General Services Administration; Om Taneja, United Nations

Monday, Session 3: 4 p.m. – 5 p.m.

Sustainable Design: A View From the Top



Intent: To inform attendees of the support for sustainable design by the Office of the Federal Environmental Executive.

Description: The Federal government has the responsibility of being a good steward of our nation's resources, as well as the opportunity to meet its mission using environmentally sustainable, and even sustaining, policies and practices. The federal government's current efforts and where it is headed in the areas of green buildings, environmental management systems, and more will be discussed.

Presenter: John Howard, Federal Environmental Executive

Tuesday, Session 4: 8:30 a.m. – 10 a.m.

Sustainability 101



Intent: To learn the basics of sustainability and what it means to energy professionals.

Description: The International Facility Management Association has created a brief, interactive version of their basic sustainability training in order to offer you answers to the following questions about sustainability: “What is it?” “Why should I care?” and “How do I do it?” Typical and sustainable design, construction practices and operation will be discussed, highlighting their differences, similarities and cost impacts. Join us to share your experiences so that they can be put in the context of sustainability. You will leave with a list of actions that you can take at your facility to make it more sustainable.

Presenter: Caren Klosterman, INVISTA; Cylette Willis, International Facility Management Association

Tuesday, Session 5: 10:30 a.m. – 12:00 p.m.

Sustainability Beyond Energy



Intent: To illustrate how indoor environmental quality, water management, and materials selection impact a facility.

Description: Materials selection, indoor environmental quality and water management are vital components of sustainability that impact the life cycle costs of the facility. Sound water management requires planning to ensure it is positively affecting daily operations and that water efficiency practices are being implemented. Indoor environmental quality impacts the effectiveness of the building occupants as well as energy consumption. Materials selection impacts not only the first cost, but also impacts operations and maintenance costs and indoor environmental quality. Facility and energy managers will learn how to integrate these sustainability topics into their energy management planning.

Presenters: Donald Posson, Kling; Kate McMordie-Stoughton, Pacific Northwest National Laboratory; George Benda, Chelsea Group

Tuesday, Session 6: 2 p.m. – 3:30 p.m.

Managing and Operating a Sustainable Facility



Intent: To learn how to translate your sustainable dream design into a fully operational facility.

Description: You have probably heard many impressive stories of sustainable design projects for new construction and renovations. What happens after the buildings are designed? Did the new technologies work as planned? You will hear from two facility managers who have been involved in the design, construction, and operation of sustainably designed facilities. They will share their lessons learned on how to avoid having the optimal design turn into the worst headache for a facility manager. Tips for success and warning signals for likely pitfalls will be discussed alongside the general process for being involved with a design team all the way through to operating the facility.

Presenters: Sheila Sheridan, Harvard Kennedy School of Government (retired); Chris Long, Environmental Protection Agency

Tuesday, Session 7: 4 p.m. – 5 p.m.

Performance Metrics



Intent: To learn how to select and use the right sustainability performance metrics.

Description: How do you measure and show the level of sustainability in a project? Selecting the right performance metrics is the first step. The right metrics are measurable, convey the real performance, and can be compared to other projects. This interactive session will cover the basics of performance metrics and how to move from project objectives to meaningful metrics. Learn about existing sources of performance metrics and how to develop your own performance metrics specific to your organization.

Presenter: Michael Deru, National Renewable Energy Laboratory

Continued

Sustainability: From Dreams to Operations continued

Wednesday, Session 8: 8:30 a.m. – 10 a.m.

Doing It Right From the Start



Intent: To learn tips from sustainable design projects for new construction.

Description: Sustainable design is becoming more mainstream, which has made staying on top of the latest developments a constant challenge. We still have much to learn about what works well and what causes more headaches than it is worth. One of the best ways to learn is to hear the details of other recent design projects. Recent projects will be used to highlight the latest design features and most common challenges that have been encountered. Learn from those who just went through it what they would do again and what they would do differently the next time.

Presenters: Doug Gehley, Einhorn Yaffee Prescott; Mary Ann Lazarus, HOK; David Guthrie, Fish and Wildlife Service



Wednesday, Session 9: 10:30 a.m. – 12 p.m.

Working With What You Have



Intent: To receive guidance from renovation projects that incorporated sustainable design principles.

Description: Renovation projects, big and small, raise many sustainability challenges that aren't encountered in new construction. Although building in a sustainable fashion from the beginning is the ideal, more often we need to figure out how to make the buildings we have work in a sustainable fashion. The U.S. Green Building Council's Leadership for Energy and Environmental Design (LEED) for Existing Buildings (EB) guides facility managers to more sustainable practices by providing a framework for assessing the performance of a building. Highlights from LEED EB case studies will be shared. The U.S. Navy will share a case study on an historical building that was renovated many years ago and has recently undergone a recommissioning effort to see if the building is still operating as intended. The U.S. Army will share how aggressive post-wide sustainability goals are driving modifications to their exiting buildings and new construction.

Presenters: Michael Arny, Leonardo Academy; Mike Chapman, U.S. Navy; Charles Howell, Washington State University

Federal Energy Management Advisory Committee

Attention:

*Federal and State Government Officials
Utility and Energy Service Companies
Equipment Manufacturers
Building Design and Management
Professionals*

Tell Us What's On Your Mind!

The Federal Energy Management Advisory Committee (FEMAC) invites all Energy 2004 participants to attend the committee's annual public meeting on Monday, August 9, from 6 p.m. to 7:30 p.m. in the Convention Center.

During Energy 2004, we will continue the tradition of holding a public forum to explore a full range of issues for enhancing energy management in the federal sector. Join other participants in a lively discussion about federal energy policy, procurement and financing, training and technical assistance, new technologies, building standards, O&M procedures and much more!

This is your opportunity to share your experiences directly with DOE Federal Energy Management Officials and the advisory committee.

Executive Order 13123 – Greening the Government through Efficient Energy Management – established FEMAC to provide public and private sector input to the Secretary of Energy on achieving energy efficiency goals for the federal sector.

Welcome to Rochester, N.Y.—August 8 - 11

The Greater Rochester area is a terrific place to visit. It's a stimulating, inventive, metropolitan area, and the third-largest urban area in New York State. But even though it's a high-tech city that's home to some of the country's leading businesses, it has also preserved many links with the past, and it claims more sites on the National Registry of Historic Places than any other city its size.

Located on Lake Ontario, Rochester is the western gateway to the fabulous Finger Lakes Region, and part of the country's longest scenic byway, the Seaway Trail.

Summer temperatures average 78 degrees F, allowing visitors and residents alike to enjoy the many outdoor activities upstate New York is famous for, including more than 80 golf courses in the area, the nearby Finger Lakes that stretch long watery trails into the heart of the state's wine-making region, the 96-foot "High Falls" waterfall in the heart of the city, and the many historic forts and museums, scenic parks and quaint villages. The Rochester Red Wings of the International League also have some home baseball games scheduled while we're in town, including the nights of August 9th and 10th (against the Buffalo Bisons) and 11th and 12th (against the Ottawa Lynx). The stadium is just a short walk from the workshop hotels.

The Rochester area is known for such cultural classics as the Eastman School of Music, the Rochester Philharmonic Orchestra, and many historic landmarks and museums. There are also three distinct downtown entertainment districts, including the newly revamped High Falls area, the East End and the St. Paul Corridor — each with its own eclectic mix of eateries, nightclubs and other attractions.

With lots of great restaurants and plenty of shopping, there's enough to keep you entertained and busy before and after Energy 2004. Bring your family to Rochester this August and enjoy a great time in a great city.



Tuesday Night

Networking/Educational Event

Tuesday, August 10: 6 p.m. – 9 p.m.

Get together with the other Energy 2004 attendees for a night of discovery at the Rochester Museum and Science Center! This is your opportunity to "Plug Into the Solutions Network" and spend an informal evening of exploring and learning along with valuable interaction with your colleagues.

You'll experience the fun of hands-on science in the museum's three floors of interactive exhibits on science and technology, the region's cultural heritage and the natural environment. Exhibits at this nationally-renowned center include:

- *Investigate what the sound of your voice looks like and how you can see a sound by experimenting in "Hear Here," the museum's newest hands-on exhibit*
- *Explore the "Cabinets of Curiosities" to see preserved animals, fossilized dinosaur footprints and other scientific curiosities in this 19th Century view of natural science*
- *Come "Face to Face" and explore the ways in which individuals express their identities to the world around them*
- *"At the Western Door" lets you examine the historical relationship between European settlers and the Seneca people who created new lives for themselves in the 1830s*
- *Many more exhibits and displays on science, history and the world around us.*

Buses will take you the short drive to the museum located on the beautiful East Avenue in Rochester. We'll have the museum and science center to ourselves as we learn from the fascinating exhibits, mingle with other workshop attendees, and enjoy dinner.

Optional Events

Technical Tours

Sunday, August 8

Complete details on each of these tours are available on the workshop website (www.energy2004.ee.doe.gov). Tours have minimum and maximum registration requirements and space is limited. Tour details are subject to change, so check the web site for current information. You can register for the tours by sending in a completed registration form (see page 41) or by using the secure online registration form.

All tours include round-trip bus transportation and a special Energy 2004 “power snack.”

Tour No. 1 **Rochester Wind and** **Co-Gen Project and Airport**

9 a.m. – 4 p.m.

Cost: \$45 (includes lunch)

Begin with a visit to Harbec Plastics, Inc. in Ontario, N.Y., and see their 250-kW wind turbine, microturbine Combined Heat and Power (CHP) power plant, green vehicle fleet and cooling pond. The microturbine CHP power plant includes twenty-five 30-kW Capstone microturbines, five recently developed heat exchangers with superior performance characteristics and a 200-ton Carrier absorption chiller which provides air-conditioning to the injection molding facility. After the tour, you will enjoy a hot dog roast at Harbec before traveling on to the Greater Rochester International Airport.

At the airport, you'll visit their CHP cogeneration plant that consists of two medium-sized 750-kilowatt engine driven cogeneration units that produce electricity and hot water. The hot water is linked to the existing airport heating system and central cooling system. In this way, hot water heat recovered from the cogeneration units is used to not only heat the airport in winter but also, through an absorption chiller, provide much of the air conditioning requirements in the summer.

Tour No. 2 **Niagara Power Project and Niagara Falls**

8:30 a.m. – 5 p.m.

Cost: \$45

The bus will take you on the 90-minute trip to the Niagara Power Project's Power Vista just downstream of Niagara Falls. You'll tour this three-level visitors center with

interactive displays, slide presentation and film, and learn about the power project from a dramatic audio-visual display on hydroelectricity, as well as a large terrain map demonstrating how Niagara River water is diverted to generate electricity. New interactive exhibits will show you how the technology works and help you learn the basics of hydropower. Then you go to the Rainbow Bridge where you're on your own for four hours to enjoy views of the falls, boat rides and other attractions, or walk across the bridge to Canada for an afternoon at shops, restaurants and attractions.

Tour No. 3 **Dunkirk Biomass Power Plant**

8 a.m. – 5 p.m.

Cost: \$45

The tour begins with a 1-3/4 hour bus ride to Dunkirk, south of Buffalo. The tour will cover the technical aspects of planting, growing and harvesting willow energy crops and co-firing biomass (including willow) at the power plant. The willow portion of the tour will include a site visit and a detailed discussion of crop yields, production equipment performance parameters, transportation logistics and project economics. The power plant tour will highlight processing/handling equipment performance and design specifications, fuel firing rates, boiler impacts including emissions benefits, and operational impacts. After the tour, the bus will take you to Niagara Falls and the Rainbow Bridge where you're on your own for four hours to enjoy views of the falls, boat rides and other attractions, or walk across the bridge to Canada for an afternoon at shops, restaurants and attractions.

Golf Tournament

The Energy 2004 Invitational Golf Tournament will be held Sunday, August 8, beginning with breakfast at 7:30 a.m. and a shotgun start at 9 a.m. Full information is available at www.bbsgolf.com/page3.html.

Bike Tour

New this year is an Energy 2004 Bike Tour. There's a scenic 14-mile ride planned on the historic Erie Canal tow path, beginning at 8:30 a.m. If you're a bike rider, you'll want to take part in this great event. Check out www.energy2004.ee.doe.gov for the details.

Pre-Workshop Programs

*Wednesday, August 4 through Friday, August 6:
8:30 a.m. – 4:30 p.m.*

Fundamentals of Measurement and Verification: Applying the New IPMVP

Proven energy savings are playing a significant role in financing energy management programs and are emerging as the basis for some emissions trades. While interest in savings data is growing, the state of the art in determining savings has also been rapidly evolving. This seminar will review current fundamental methods of measuring and verifying savings, specifically reviewing the International Performance Measurement and Verification Protocol (IPMVP). Attendees will learn the process of designing a proper M&V program for their projects, considering current topics such as cost/accuracy tradeoffs, baseline adjustments, the role of stipulations, maintaining space conditions, the role of verifiers and the data needed for emissions trading. Examples of specific techniques will be presented while addressing common pitfalls in using utility bills, measurement equipment, and computer simulations. The Certified Measurement and Verification Professional (CMVP) exam will be given on Friday afternoon, August 6. (2 CEUs, equal to 4 credits toward CEM recertification).

Instructors: John D. Cowan, Environmental Interface Limited; Steve Sain, Sain Engineering Associates, Inc.

Fees: seminar only: \$1,050 for government, non-profit and AEE members; \$1,150 for non-members. (Note: Registering for the seminar does not automatically register you to take the CMVP exam.). Certification application and examination: \$400.

To register: call Valerie Oviatt at 770-925-9633.

For more information: contact Ruth Marie at 770-447-5083, extension 210.

*Thursday, August 5 and Friday, August 6:
8:30 a.m. – 4:30 p.m.*

Skills Update III for Certified Energy Managers

This seminar is sponsored by the Association of Energy Engineers and is intended for professionals who already have the CEM credential. The presentation is a follow-up to the popular “Comprehensive Five-Day Training Program for Energy Managers” and is presented by the same instructors. It addresses several advanced topics that are not fully covered in basic seminars, including new technologies for HVAC systems; commissioning, recommissioning and continuous commissioning; solar energy technologies; energy management in pumping systems and infrared imaging and energy management. (1.6 CEU, equal to 3.2 credits toward CEM recertification).

Instructors: Barney L. Capehart, University of Florida; Wayne C. Turner, Oklahoma State University

Fees: \$950 for government, non-profit and AEE members; \$1,050 for non-members.

To register: call Valerie Oviatt at 770-925-9633.

For more information: contact Ruth Marie at 770-447-5083, extension 210.



Continued

Pre-Workshop Programs continued

*Friday, August 6: 8 a.m. – 5 p.m., and
Saturday, August 7: 8 a.m. – 12 p.m.*

Advanced Lighting Applications: Taking Your Lighting Systems to the Next Level

Lighting systems still represent a large slice of your building electrical energy pie. If your lighting systems have not been improved lately, it may be time to revisit them. Lighting products have continued to rapidly evolve and improve and several trends are converging to open up new opportunities for improvement.

Many organizations are realizing the energy and cost-saving benefits of installing lighting controls. Two trends are converging to open new opportunities — the availability of simple controls through improved technology and stricter building codes. The choice is not whether to install lighting controls but which controls to install.

All these opportunities will be explored in-depth in this practical, hands-on workshop. Case histories, best practices, and mistakes to avoid will all be discussed to provide attendees with information they can apply for immediate results.

Instructor: John Fetters, Principal, Effective Lighting Solutions, Inc.

Fee: \$675 per participant

For more information or to register:
contact Effective Lighting Solutions at (614) 258-5483
or johnlfetters@rroho.com.

Saturday, August 7: 8 a.m. – 5 p.m.

Cost-Effective Solar Applications for C & I Facilities

This presentation is a condensation of a portion of ASHRAE's Solar Short Course. It presents an overview of cost-effective renewable energy applications for the Commercial and Industrial sectors. The course includes information on Solar Thermal and Electric Applications for developed and rural applications with an emphasis on commercial water and pool heating, solar industrial process heating (water and air), photovoltaics and other viable renewable energy applications for the International Community ASHRAE serves.

As part of this presentation, a method of directly comparing the cost of solar energy to conventional (utility) energy sources will be presented. The economic methodology, employing a Life Cycle Cost approach, is designed to enable users to evaluate the economic feasibility of potential solar applications quickly in order to make preliminary go-no go decisions and rank alternative projects.

Instructor: Henry M. Healey, a Professional Engineer and ASHRAE member with extensive experience in the application of commercial and industrial solar systems, education and training.

Fee: \$95

For more information or to register:
contact cecelia@flaenergy.com.



Sunday, August 8: 9 a.m. – 4:30 p.m.

Strategic Energy Planning Workshop

This course will help you develop a systematic, process-driven approach to your energy program that integrates energy into your organization's overall business objectives. In this intensive workshop, you will:

- *Gain insight into the value of planning your energy use strategically.*
- *Learn a process to develop a plan to guide your organization in managing its energy more effectively and to achieve results that will improve business performance.*
- *Develop a performance scorecard that will rate your organization in five key areas - energy data management, energy supply management, energy use in facilities, equipment efficiency, and organizational integration.*
- *Use tools and methodologies to create your own strategic energy plan.*
- *Understand how to communicate the value of your energy program across the entire organization.*
- *Create a system for effectively capturing and sustaining energy savings.*

Instructor: David Mahoney, founder and president of GEM Management Consultants, Inc.

Fee: \$395 per person.

For more information or to register: contact Marlan Johnson at (404) 894-2196 or marlan.johnson@edi.gatech.edu

Sunday, August 8: 1:30 p.m. – 4:30 p.m.

Introduction to Distributed Generation and Combined Heat and Power for Federal Energy Professionals

This workshop provides an introduction to how distributed generation and combined heat and power projects are designed and implemented, with a focus on how to identify good project opportunities and get started. Participants will learn how to address issues related to sizing, configurations, financing, interconnection and permitting. Come learn about the hardware options, including prime movers to generate power, and thermally activated technologies to use waste heat and how they can be applied to meet your needs. Key concepts will be illustrated with case studies. Get an opportunity to meet private industry representatives who have extensive experience with successful projects. Attendees will learn what the key questions are when considering a project and where to get answers.

This workshop is sponsored by the U.S. Combined Heat and Power Association and the U.S. Department of Energy, Federal Energy Management Program.

Instructors: EE. Pierce, senior mechanical engineer and member of CHP core technical team at Oak Ridge National Laboratory, along with industry leaders. Workshop host is John W. Jimison, Executive Director and General Counsel to the United States Combined Heat and Power Association.

Fee: no charge.

For more information or to register: send your name, affiliation, email and phone contact information to stansberry1@ornl.gov or call Linda Stansberry at 865-574-0266. You can also register online at FEMP: <http://fempcentral.com/workshops/registration.ws>.

Special Tour: An optional Sunday morning tour has been arranged for attendees of this pre-workshop program who want to visit a CHP site. Buses will leave the Convention Center at 9:30 a.m. Sunday morning for a tour of the Greater Rochester International Airport's CHP cogeneration plant (a NYSERDA-supported project) and the operations center (get full details at www.rocenergysavings.com). The buses will get you back to the Convention Center by noon in time for this afternoon workshop. Cost of the tour is \$25 per person. To register for the tour, please contact energy2004@fsec.ucf.edu or call 800-395-8574. Note that a minimum of 20 participants is required for the tour.

Post-Workshop Programs

Wednesday, August 11: 4 p.m. – 6 p.m.

BAMF Baseball

Hey Batter, Batter, Batter! It's August. It's hot. It's New York. It's time for BAMF Baseball. Come join us for the opportunity to display your athletic prowess and knowledge of the Biomass and Alternative Methane Fuels (BAMF) Program. Who says you can't learn and have fun at the same time? Whether you're a slugger or a spectator, you should enjoy this fun way to hear more about FEMP's latest Super ESPC contract and win fabulous prizes. The BAMF ESCOs challenge all agency energy managers to step up to the plate.

Instructor: Chris Abbuehl, Department of Energy

Fee: no charge, but please sign up in advance.

For more information or to register:

christopher.abbuehl@ee.doe.gov, or 215-656-6995.



Thursday, August 12: 8 a.m. – 5 p.m.

Continuous Commissioning® – Your Best Energy Efficiency Investment After People

Learn first-hand one of the most cost-effective energy efficiency measures available to federal energy managers — continuous commissioning of your facilities.

If you want to:

- Reduce energy use by 10 - 50 percent
- Improve occupant comfort and health
- Improve employee productivity
- Improve indoor air quality
- Get the best performance possible out of your buildings without expensive upgrades, and
- Realize fast paybacks (2 - 3 years),

then this workshop is for you!

Participants will learn what continuous commissioning entails, as well as an explanation of how it can be applied to individual building systems, controls and operations to achieve optimum savings and building performance. Each attendee will receive a copy of the FEMP guidebook on continuous commissioning produced by the Energy Systems Laboratory, Texas A&M University System. Numerous case studies of real-world commissioning projects in federal and large institutional buildings will be presented. Learn how this technique is saving federal installations millions of dollars with an average investment of \$0.50 per square foot.

Instructor: Dr. Dan Turner, P.E., Director, Energy Systems Laboratory, Texas A&M University System

Fee: \$350

For more information or to register:

contact Lana Tolleson at ltolles@esl.tamu.edu.

Thursday, August 12: 8 a.m. – 5 p.m.

LEED Intermediate Training Workshop

This workshop will help professionals prepare for the LEED Accreditation Exam by providing a technical review of each point in the LEED Green Building Rating System. Participants will learn more about green building design benefits and strategies, green building resources to use in projects, and acquiring the tools and insights for leveraging green design and LEED into practice. Co-Sponsored by the Upstate N.Y. Chapter, USGBC.

Instructors: two members of the USGBC LEED Faculty

Fee: \$325 for USGBC members; \$425 for non-members

For more information or to register:

Visit www.usgbc.org or contact USGBC staff at workshop@usgbc.org.

Thursday, August 12: 8 a.m. – 4:30 p.m.

DOE BestPractices Steam End User Training

This training is the first in a series of popular courses offered by DOE's BestPractices Steam initiative. The training covers the operation of typical steam systems and discusses methods of system efficiency improvement. It is conducted by a DOE-Qualified Steam Instructor and is designed for end users - at the energy manager, steam system supervisor, engineer, and operations level - who have steam system responsibilities in industrial and institutional plants. The course is divided into three major categories: Steam Generation Efficiency, Resource Utilization Effectiveness, and Steam Distribution System Losses. The agenda will cover BestPractices Steam publications such as the Steam System Survey Guide and software including the Steam System Scoping Tool (SSST), the Steam System Assessment Tool (SSAT), and the 3E-Plus insulation appraiser. Trainees should download a copy of the Steam System Scoping Tool and run the software for their facility before attending the class. The software and other materials are available from the BestPractices Steam website at: <http://www.oit.doe.gov/bestpractices/steam/>.

Instructor: Richard Jendrucko, DOE Steam BestPractices Qualified Instructor, University of Tennessee

Fee: no charge, but seating is limited to 30 participants.

For more information:

http://www.oit.doe.gov/bestpractices/training/steam_training_sessions.shtml.

To register: contact Linda Stansberry at 865-574-0266 or stansberry1@ornl.gov.

Thursday, August 12: 8 a.m. – 12 p.m.

Control Systems

This course will focus on procurement of control systems that include building automation systems as well as heating, ventilating and air-conditioning systems and fire alarm systems. The Army Corps of Engineers, Huntsville, has several task order contract vehicles available to accomplish this procurement. Their office is the center of expertise for utility monitoring and control systems for the Army Corps of Engineers, and they are a technical center with contracting capabilities.

Fee: no charge

For more information or to register: contact Rob Hile at rhile@gventerprise.com or 940-484-4005.



Continued

Post-Workshop Programs continued

Thursday, August 12: 8:30 a.m. – 12 p.m.

Energy Project Financing Workshop

This hands-on workshop provides an overview of the federal government contracting methods available to energy managers, facility technical staff, building managers and contracting officers to implement the installation of energy efficiency and water conservation measures. The contracting mechanisms that will be discussed include utility area-wide contracts, demand side management, DOE and DOD Energy Savings Performance Contracting and the GSA Federal Supply Schedules.

The goal of the course is to educate those involved in designing, implementing and contracting of energy efficiency and water conservation projects, show how each of the different contracting mechanisms work, and explain their parameters. The pros and cons of each contracting mechanism will be discussed, as well as how to get the most out of the different finance options/language.

Instructors: Contracting experts from the Department of Energy, General Services Administration and Department of Defense, and Financing Institutions

Fee: no charge, but seating is limited.

For more information or to register: contact Steve Ganzer at (301) 305-1460 or steve.ganzer@ttemi.com

Thursday, August 12: 1 p.m. – 4 p.m.

Resource Efficiency Management (REM) Workshop

Resource Efficiency Management (REM) is an innovative management approach that focuses on reducing energy and other resource consumption, saving money, and helping the environment. Under the REM Program, a full-time, on-site Resource Efficiency Manager will support the efforts of government agencies to reduce energy costs and consumption and meet their energy conservation goals. The REM program augments existing facility resources and focuses on no- and low-cost opportunities to reduce energy consumption in real time, including behavioral aspects of energy end-uses and operation and maintenance measures. The REM program integrates the economic aspects of energy management to apply sound, performance-based technology and management solutions to reduce energy, water, and other resource consumption. A unique feature of the program is that REM pays for itself through energy cost savings, rebates and incentives, and verifiable cost avoidances.

The goal of the workshop is to allow those involved in facility energy conservation to learn more about REM. Topics will include: What Is REM?; REM Focus Areas; REM Program Results and Benefits; Contracting for a REM, and Sustaining a REM Program. The workshop is a great opportunity to learn more about REM and energy management strategies being implemented by some of the most successful federal energy management programs in the country. Ask our energy experts about energy programs tailored to your facility. The workshop will also allow you to ask questions from some of the leading experts in REM on how an REM program can help your facility more effectively manage its energy resources and save money.

Instructors: experts from the federal government and the private sector

Fee: none, but seating will be limited.

For more information or to register: contact Steve Ganzer at (301) 305-1460 or steve.ganzer@ttemi.com.

Training for Vendors

Sunday, August 8: 2 p.m. – 4 p.m.

Doing Business with the Federal Government



Getting into business with the U. S. government can be a daunting challenge for sole proprietors and large corporations alike. This pre-workshop session will help answer the question “What do I need to do to sell my products and services to Federal agencies?” Procurement specialists from the General Services Administration, Department of Energy and Department of Defense will be on hand to provide tips and advice on how to get started and where to go for help.

Fee: no charge. Just show up for the program.

(Been there? Done that? Know what to do, but not how to do it? Try “Vendors: Are You Ready for Business with the U. S. Government?” on Monday, August 9, 2 p.m. – 3:30 p.m. Exhibitors welcome.)



Monday, August 9: 2 p.m. – 3:30 p.m.

Vendors: Are You Ready for Business with the U.S. Government?



All too often companies have an innovative technical solution they believe an agency should be interested in buying, and many times their concepts are exciting to the government but technology alone is not enough.

Even though an agency may have an interest in pursuing innovative concepts, the contractor has to be able to prepare a proposal, support the price being offered and have the infrastructure to support the contract type awarded by the agency. Among the things successful contractors understand are:

- *Basic rules, regulations, standards, and guidelines applicable to government contractors*
- *Who is who in the contracting hierarchy:*
 - Who has the need?*
 - Who has the money?*
 - Who can obligate the government?*
- *Difference between a prime contractor and the government (even though they often look the same)*
- *Implications of the various contract types and how risk is allocated between the buyer and the seller*
- *Circumstances when an unsolicited proposal may be appropriate and the risks associated with submitting an unsolicited proposal*
- *Critical difference between cost estimates and contract prices*

Instructors: Terry Carlson, Government Contract Group, and Steve Pinkerton, Principal, Advanced Energy Systems Group, Navigant Consulting, Inc.

Fee: no charge. This session does not require conference registration. Exhibitors are welcome and encouraged to attend.

How to Register

Please read this information before registering.

The registration form for workshop attendees is on the next page. Please use this form if you wish to mail or fax your registration. Note that the form is also available online for secure web registration (www.energy2004.ee.doe.gov). You will be sent a confirmation letter when your registration is received.

If your company is an exhibitor at Energy 2004, contact Exhibit Promotions Plus at 410-997-0763 or energy@epponline.com. If you are a speaker, contact your Track Lead for a speaker registration form and information on the speakers-only website.

All participants in Energy 2004 sessions, meal functions, social events and other programs must be registered or signed up for the event. Only fully registered attendees will be allowed in the sessions. Tickets will be sold at the on-site registration table for guests wishing to attend meal functions, social events or tours. Passes will also be available at no charge for guests accompanying you to the receptions.

Registration Fees

Regular registration is \$565. There is an Early Registration rate of \$465 for registrations postmarked by July 8. There is also a team discount available for four or more workshop registrants from the same organization who register at the same time, postmarked by July 8. The team discount fee is \$420 per person. The one-day rate for attendees is \$365.

Technical Tour Registration

If you wish to sign up in advance for one of the tours, you can use the registration form. Note that these tours are optional and there is an extra cost for each tour. You can sign up on-site if there is space available. See page 32 for information on the tours.

Payment Information

Please make your check or purchase order payable to: Florida Solar Energy Center, Energy 2004. Note that the Florida Solar Energy Center's FEID No. is 59-2924021. All checks must be drawn on a U.S. bank.

Wire Transfer or Electronic Funds Transfer

If your registration fee will be paid by wire transfer or electronic funds transfer, please reference account number 37025040 on your paperwork so the funds will be properly credited. It would also be helpful to notify us (energy2004@fsec.ucf.edu) when the funds are sent to assure that they are properly credited to your registration.

Cancellation Policy

The registration fee, minus a \$50 service charge, will be refunded for written cancellations of registration and/or tours received prior to July 28. No refunds after that date. You may substitute attendees at any time by sending written notice of the change prior to July 28. After that date, please bring the information to the on-site registration table at the workshop. Send written notice of cancellation or changes by e-mail to energy2004@fsec.ucf.edu; by fax: 321-638-1010, or by mail to Energy 2004, 1679 Clearlake Road, Cocoa, FL 32922. If you have any questions, call 800-395-8574 or 321-638-3433.

Special Needs

Please indicate any special needs (e.g. vegetarian) on the registration form. We will attempt to honor all special requests. If you require any special services, please indicate details on the registration form.

**Mail or fax the completed registration form to:
Energy 2004, 1679 Clearlake Road, Cocoa, FL 32922-5703. Fax: 321-638-1010**

Please do not submit the registration form after July 28.

If you are registering after that date, bring this form to the on-site registration table at Energy 2004.

Workshop Registration Form

Energy 2004, August 8-11, 2004, Rochester, New York

Please read the information on page 40 before filling out this form..

Please print clearly.

First Name: _____ Last Name: _____

Title: _____ Name on Badge: _____

Agency/Organization/Company: _____

Site Name/Company line #2: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Business Phone: () _____ Fax: () _____

E-mail Address: _____

Special Needs: _____

Comments: _____

Emergency Contact and Phone: _____

REGISTRATION FEE (select one):

- ☐ Early Registration
(postmarked by July 8)\$465
- ☐ Team Discount
(postmarked by July 8)\$420 ea.
- ☐ Regular Registration.....\$565
- ☐ One-Day registration.....\$365
- ☐ Monday ☐ Tuesday ☐ Wednesday

TECHNICAL TOUR REGISTRATION:

(See page 32 for tour descriptions, times and important details. All tours will be held on Sunday, August 8.)

- ☐ Tour #1 (Wind, Co-Gen and Airport)
9:00 a.m. - 4 p.m.\$45
No. of tickets: _____
- ☐ Tour #2 (Niagara Power Project)
8:30 a.m. - 5 p.m.\$45
No. of tickets: _____
- ☐ Tour #3 (Biomass Power Plant)
8 a.m. - 5 p.m.\$45
No. of tickets: _____

How did you hear about this workshop? (check all that apply)

- ☐ At Energy 2003 ☐ Online ad/calendar listing ☐ Trade publication/ad
- ☐ Email ☐ Colleague/word-of-mouth ☐ Direct mail/flyer
- ☐ Previous attendee ☐ Another conference/trade show
- ☐ Other: _____

Method of Payment: (select one)

- ☐ Government Training Form ☐ Company Purchase Order
- ☐ Wire Transfer or Electronic Funds Transfer ☐ Check
- Credit Card: ☐ American Express ☐ VISA
- ☐ MasterCard ☐ Discover

Credit Card Number: _____

Expiration Date: _____ Total Amount Due: \$ _____

Mail or fax this form to:

ENERGY 2004
1679 Clearlake Road, Cocoa, FL 32922-5703
FAX: 321-638-1010

Florida Solar Energy Center
1679 Clearlake Road
Cocoa, FL 32922

Non Profit
Organization
U.S. POSTAGE PAID
Permit No. 136
Cocoa, FL 32926

Address Service Requested



"We're Greening the Meeting in '04"

With your help, Energy 2004 will leave the smallest possible environmental footprint in Rochester and be remembered as a truly green meeting. Last year, more than half of our attendees registered online through our secure web site in lieu of using paper forms. We hope to increase that percentage this year and save even more paper.

We selected a city that offers low-cost, frequent ground transportation between our hotels and the airport to preclude the need for renting single-occupant cars.

We selected a convention center you can walk to from your hotel.

We encouraged our hotels to utilize green housekeeping principles to the maximum extent possible. Examples include signage that encourages guests to re-use towels and permit housekeepers to change bed linens less often.

We use e-mail to confirm registrations instead of wasteful paper mail-outs or faxes.

We've kept printed materials to a minimum. Rather than distributing paper copies of presentations, we post them on the web site.

We encourage our exposition exhibitors to use a paperless system to track potential leads.

We require the convention center to minimize the use of disposable cups, plates and condiments and therefore reduce what winds up in the waste stream.

We do not set water glasses out at meals if we are already serving iced tea or other cold beverage. This saves energy and water normally used to wash and dry the glassware.

We carefully analyze past years' meal functions to better estimate food requirements. We then work in advance with the caterer to design a menu that minimizes food waste.

We request attendees to tell us — upon arrival — if they will be attending the closing luncheon, to better estimate our food requirements.

Please...

... help us avoid wasteful duplicate mailings.

If you receive more than one copy of this brochure, need to have your address corrected or wish to be removed from our mailing list, please fax a note with the corrected version to (321) 638-1010.

Thank you.



Printed on recycled paper using soy-based inks to conserve resources.